

Environmental Assessment

*The Public Health Service Hospital
at the Presidio of San Francisco*

February 2004

Appendices

- A Draft Planning and Design Guidelines
- B Scoping Information Packet
- C Construction and Demolition Debris Management Plan Requirements
- D Consultation Letters

Figures

1	PHSH District and Project Site Boundaries	5
2	Existing Conditions at the PHS	10
3	Related Ongoing Activities	20
4	Alternative 1: PTMP or No Action Alternative	25
5	Alternative 2: Infill Alternative	29
6	Alternative 3: No Infill Alternative	33
7	Alternative 4: Battery Caulfield Alternative	36
8	Park Presidio Access Variant	41
9	Study Intersections	59
10	Existing Transit Routes	63
11	Trails and Bikeways	67
12	Historic Buildings and Archaeological Resources	90
13	Building 1801, Existing Conditions	117
14	View Looking North from the Central Green, Existing Conditions	118
15	View Toward Battery Caulfield, Existing Conditions	119
16	Important Views to and from the PHS District	121
17	Building 1801, Alternative 2 (Non-historic Wings Remain at their Current Height)	123
18	Building 1801, Alternative 2 (Non-historic Wings Reduced in Height)	124
19	View Looking North from the Central Green, Alternatives 2 and 4	125
20	Building 1801, Alternative 3 and 4 (Non-historic Wings Removed)	126
21	View Toward Battery Caulfield, Alternative 4	128
22	Existing Site Hydrology	154
23	Conceptual Cross Section of Hydrologic Conditions at Battery Caulfield	157
24	Biological Resources	165

Tables

1	Presidio Trust Federal Appropriations, Fiscal Years 1999 to 2004	13
2	Summary of Alternatives for the PHSB Project	24
3	Existing and Projected Housing Demand at the Presidio	50
4	Projected Land Use, Population, and Employment at the PHSB District by Alternative	51
5	Intersection Levels of Service – Weekday AM and PM Peak Hours Existing Conditions	61
6	Existing MUNI Passenger Loads	64
7	Trip Generation Rates by Land Use	70
8	Estimated Trip Generation by Mode of Travel and by Alternative Weekday Daily, AM and PM Peak Hour	71
9	Intersection Levels of Service – Weekday AM Peak Hour Year 2020 Conditions	74
10	Intersection Levels of Service – Weekday PM Peak Hour Year 2020 Conditions	75
11	Comparison of Peak Hour Traffic Volumes through 14 th /15 th Avenue Gates	78
12	Peak Hour Transit Trips to/from Project Site by Service Provider and Alternative	80
13	Parking Demand by Time of Day and Alternative	84
14	Predicted Localized CO Concentrations at Congested Intersections	108
15	Estimated Average Weekday Emissions from Vehicle Trips and Area Sources	109
16	FHWA Noise Abatement Criteria	110
17	Summary of Short-Term Noise Measurements, PHSB District	112
18	Traffic Noise Levels In the Vicinity of PHSB Gates by Alternative	113
19	Annual Utility Demands	137
20	Known Occurrences of Special-Status Plant Species Near the Project Site	168
21	Occurrences of Special-Status Wildlife Species Near the Project Site	170

Introduction and Background

In August 2002, the Presidio Trust (Trust) adopted the Presidio Trust Management Plan, Land Use Policies for Area B of the Presidio of San Francisco (the PTMP or the Plan), which established a policy framework for future decision-making (Trust 2002a). The accompanying program-level environmental impact statement (EIS) analyzed a range of land use alternatives for the Presidio's seven planning districts, including development of a residential and educational community in the 42-acre Public Health Service Hospital planning district (PHSH district or district) (Trust 2002b). Consistent with the PTMP, the Trust is now proposing to undertake leasing and development in the PHSH district.

This environmental assessment (EA) identifies the environmental effects of the Trust's proposed project within the PHSH district. The Council on Environmental Quality's (CEQ) regulations implementing the National Environmental Policy Act (NEPA) allow federal agencies such as the Trust to prepare an EA to assist agency planning and decision-making (40 CFR 1501.3). An EA provides evidence and analysis to determine whether an EIS is required, aids a federal agency's compliance with the NEPA when an EIS is not necessary, and facilitates preparing an EIS if one is necessary (40 CFR 1508.9(a)).

This EA tiers from the PTMP EIS and analyzes specific project alternatives for implementing the planned goals for the PHSH district.¹ In tiering from the PTMP EIS, the EA incorporates by reference the information and analysis presented in the PTMP EIS and concentrates on site-specific issues related to the current project. The relevance of PTMP EIS mitigation measures to the current project is also discussed. The EA is divided into four sections:

1. Purpose and need for the proposed action;
2. Description of the proposed action and alternatives considered, including a no action alternative;
3. Affected environment and environmental consequences of the proposed action and alternatives, including mitigation measures; and
4. A summary of the consultation and public scoping process and a list of agencies, organizations, and persons consulted.

The draft Planning and Design Guidelines proposed for adoption as part of the project, as well as other background information, are included in the appendices.

¹ The CEQ NEPA Regulations encourage the use of tiered documents to "eliminate repetitive discussions of the same issues" (40 CFR 1502.20) and to "focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe" (40 CFR 1508.28). The PTMP EIS can be viewed at the Presidio Trust Library, 34 Graham Street, San Francisco, California or on the Trust's website (www.presidio.gov).

THE PRESIDIO OF SAN FRANCISCO

The 1,491-acre Presidio of San Francisco (Presidio) is one of the country's most beautiful places. Its distinctive resources include historic architecture and landscapes, unique ecological systems and rare plant communities, inviting parklands, an open shoreline, spectacular views, and varied recreational resources. Situated within the San Francisco Bay Area at the center of the 77,000-acre Golden Gate National Recreation Area (GGNRA), the Presidio attracts visitors from near and far.

A military garrison since 1776, the Presidio was designated a National Historic Landmark District (NHLD) in 1962. The Presidio contains one of our country's finest collections of military places, buildings, structures, and artifacts; its architecture represents every major period of U.S. military history since the 1850s. Archeological evidence of Native American inhabitants and early Spanish and Mexican encampments complements this rich architectural heritage.

The Presidio's 770 buildings total approximately 6.1 million square feet and include an array of offices, warehouses, workshops, and residences; over 450 buildings are historic and contribute to the Presidio's NHLD designation. Residential structures include large single-family homes and duplexes, as well as apartment complexes and barracks. The Presidio has facilities and amenities that serve residents, park visitors, and non-residential tenants that include a mix of non-profit and for-profit organizations. The Presidio has its own electric distribution, telecommunication, water, wastewater collection, storm drain, and refuse collection systems and services. The Trust also operates a park shuttle to supplement local and regional transit services.

Dramatic headlands, a favorable climate, rich soils, water resources, and protected open space have contributed to the Presidio's rich biological diversity. Remnant native plant communities preserve rare and endangered plant species and provide valuable wildlife habitat. In addition, the magnificent 300-acre Presidio forest defines the Presidio and sets the park apart from the adjacent city. A planned system of trails, bikeways, and overlooks will improve the visitor experience and enhance recreational opportunities while protecting the park's natural resources.

FROM MILITARY POST TO NATIONAL PARK

The Presidio's transition from military post to national park began in 1972 when Congress provided that the Presidio would become part of the GGNRA if the military ever declared the post superfluous to its needs. Congress designated the Presidio for closure in 1989, and in 1994 the U.S. Army transferred its jurisdiction to the National Park Service (NPS).

In 1994, during the transition from post to park, the NPS adopted a plan for the Presidio's use and management, the General Management Plan Amendment (GMPA). As part of the GMPA, the NPS prepared the Presidio Building, Leasing and Financing Implementation Strategy, which estimated annual operating costs to be \$40 million, and capital improvements to be in excess of \$500 million. According to the NPS plan, these costs would be funded by a combination of leases and operating agreements, U.S. Treasury and/or private sector resources, a continuing annual congressional appropriation of between \$16

and \$25 million, and philanthropic funds. The GMPA cost estimates indicated that the Presidio was by far the most expensive park managed by the NPS and far more expensive than the U.S. Congress was willing to support over time. Congress therefore created a new agency charged with improving, protecting, and maintaining the Presidio by using the park's built resources to generate revenue to support the park.

THE PRESIDIO TRUST AND ITS MANDATE

In 1996, Congress passed the Presidio Trust Act (16 USC §§ 460bb appendix) and established the Presidio Trust, which assumed jurisdiction over the interior 1,100 acres of the Presidio (Area B) on July 1, 1998; NPS retains control over the coastal areas (Area A). Congress also directed the Trust to become financially self-sufficient by 2013, at which time annual federal appropriations would end.

Congress provided the Trust with the necessary tools to achieve its mission. The Trust is a wholly-owned federal government corporation that may generate and retain revenue, lease real property within Area B, make loans, and provide loan guarantees to encourage the use of non-federal funds by third parties to invest in the repair and rehabilitation of the Presidio's historic buildings and infrastructure.

The Trust is governed by a seven-person Board of Directors. Six members are appointed by the President of the United States, and the seventh is the Secretary of the Interior or the Secretary's delegate. The Trust is managed by an executive director and a professional staff with expertise in real estate leasing, finance, development, property management, park stewardship, and natural and cultural resource protection and management.

Since the Trust began operations in 1998, the budget needed to operate, maintain, and enhance the park has borne out the initial estimates of the high costs and complexity of managing the Presidio. In the first years of operation, the Trust focused on upgrading the Presidio's aging infrastructure, and on rehabilitating the Presidio's most reliable source of revenue – its housing. The Trust also recognized the need to capitalize on a strong real estate market by negotiating long-term leases for several key buildings. In 1998, the Trust began the process to lease a 23-acre site in the Presidio's Letterman district, and in 2002 signed a lease with Letterman Digital Arts Ltd. (LDA) to redevelop the obsolete Letterman Hospital and research center as a digital arts campus.

In addition to the LDA project, the Trust attempted to undertake other rehabilitation and leasing projects, including the PHS. Many members of the public criticized these early projects for departing from the NPS GMPA. The NPS plan was not constrained by the need to make the park financially self-sufficient, and it did not provide the necessary flexibility to respond to the realities of the real estate market – now an important factor in how the Trust must manage the park.

In August 2002, after two years of extensive planning, agency and public input, and public review, the Trust adopted a new management plan for Area B. The PTMP sets out a general policy framework that balances preservation of open space and other park resources with building uses that support both the financial needs of the park and the goal of serving the public. The Plan also emphasizes that the Trust's financial challenge cannot be understood apart from the mandate to preserve and protect the park. The

park need not make money as an end in itself, but rather as the means to save its beloved resources – historic, natural, scenic, and recreational.

For more than two years, while preparing the PTMP, the Trust did not undertake any long-term leases. Now that the PTMP has been adopted, the Trust must resume long-term leasing, which is critical to the Trust's ability to rehabilitate its historic structures and to meet its congressionally set financial goals. The Trust must attract tenants and investors with the capacity and expertise to assume the substantial costs of rehabilitating and reusing the Presidio's buildings. To that end, the Trust must be able to negotiate long-term leases that are beneficial both to investors and to the park.

PLANNING CONTEXT AND TERMINOLOGY

The PTMP identified the PHSB district for reuse as a Residential and Educational Community, but stated a preference for residential use in the main hospital building (PHSB or Building 1801). The PHSB district is about 42 acres, of which about 15 acres have been previously developed or disturbed. For ease of discussion and understanding, the district can be considered as two geographic areas. The southern portion of the district is a 12-acre developed area with a collection of 15 buildings, including the historic PHSB and its nearby complex of dormitories, offices, residences, and recreational buildings. The southern portion of the district is sometimes referred to as the "lower plateau" and its collection of buildings as the "PHSB complex."

The northern portion of the PHSB district includes previously disturbed areas mixed with remnant natural habitats. This second area, sometimes referred to as the "upper plateau," has five small historic buildings, three of which are included in the current project (Buildings 1449 and 1451 are excluded.) The upper plateau also contains a Trust/NPS maintenance and corporation yard and three underground former missile silos. The three-acre site of the corporation yard and missile silos is referred to as "Battery Caulfield" or sometimes the "Nike Missile Site." Together, the PHSB complex and Battery Caulfield are referred to as the "project site" or the "site" (see Figure 1).

The area between Battery Caulfield and the PHSB complex (sometimes referred to as the "Nike Swale area") supports ecologically significant native plant communities that include coast live oak woodland, central dune scrub, and riparian and dune slack wetland vegetation, as well as the San Francisco lessingia (*Lessingia germanorum*), a federally listed endangered plant. Vegetation in the Nike Swale area and north of Battery Caulfield provides habitat for the largest known quail population in San Francisco, as well as other bird species. The PTMP calls for the rare plant and wildlife species habitat and remnant natural systems to be protected and revitalized, and none of the project alternatives would include development in this area.

Building space within the PHSB district today totals approximately 400,000 square feet. The PTMP's centerpiece for the district was the rehabilitation and reuse of the historic PHSB for residential use if feasible, and rehabilitation and reuse of the other historic structures within the district. Building 1801 is

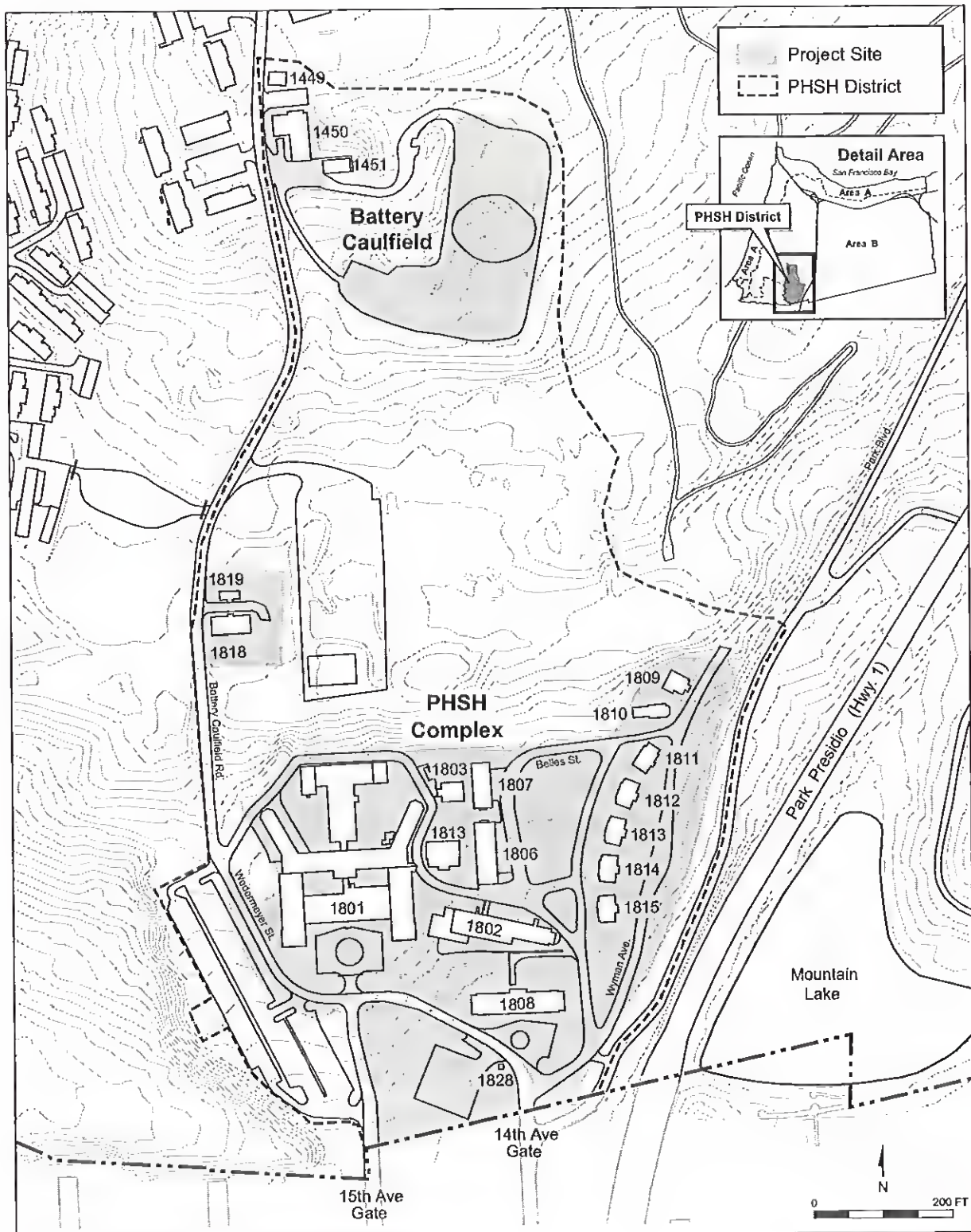


FIGURE 1. PSH DISTRICT AND PROJECT SITE BOUNDARIES

Source: Presidio Trust, 2003

an historic structure of about 173,000 square feet and non-historic additions or “wings” that flank the historic structure and total about 125,000 square feet. Under the PTMP, future planning could consider removal of the PHSB if it was found to be infeasible to retain. Also, possible development in the district was “capped” at 400,000 square feet, meaning that there could be no increase in square footage over existing conditions. Up to a maximum of 130,000 square feet of demolition and replacement construction was permitted within the district.

CONCURRENT LEASING AND ENVIRONMENTAL REVIEW PROCESS FOR THE PHSB

The Trust is now engaged in a process to rehabilitate and lease buildings within the PHSB district consistent with the reuse goals presented in the PTMP. When the Trust issued a Request for Qualifications (RFQ) for the PHSB in 1999 (Trust 1999), it received 14 proposals. The Trust elected not to proceed with the project at that time, however, due to the wide variety of proposals and a host of unresolved issues. In the course of developing the PTMP, the Trust set clearer parameters and reuse options for the PHSB district that were also consistent with the comments received from the adjoining neighborhoods. The PTMP identified leasing of the PHSB buildings as an important “next step” given the serious physical deterioration of the historic buildings and the Trust’s commitment to pursue conversion of non-residential buildings to residential use.

Start of Leasing Process / 2003 PHSB RFQ

In April 2003, the Trust again issued a solicitation seeking development teams qualified to undertake the rehabilitation and reuse of the buildings within the PHSB district. The Trust distributed the RFQ and accompanying draft Planning and Design Guidelines (included in this EA as Appendix A) to more than 5,000 individuals and/or organizations (Trust 2003a and 2003b). Approximately 100 people attended the Trust’s public pre-submittal meeting on May 6, 2003 for a project briefing and tour of the site. The Trust has also engaged in more than 30 public meetings and briefings with neighborhood groups and other interested parties, as described in Section 4 of this EA.

On June 23, 2003, the Trust received nine responses to the PHSB RFQ. Evaluation of these submittals focused on team qualifications and on narrowing the field from which to request detailed proposals. In evaluating qualifications, the Trust considered broad criteria, including experience with similar projects and historic building rehabilitation, as well as the use of historic tax credits, financial capability, proposed public outreach efforts, compatibility of the project concepts with the Presidio’s NHL status, and responsiveness of the initial project concept to the Trust’s goals and objectives for the project.

Following an evaluation of the responses by Trust staff, the Trust Board of Directors invited Forest City Development, the John Stewart Company and the Related Companies of California, and Avalon Bay Communities, Inc. to submit detailed proposals by October 27, 2003. Avalon Bay subsequently chose to withdraw from the process.

Start of NEPA Process / Scoping

On August 27, 2003, the Trust issued a Request for Proposals (RFP) to the three qualifying teams and also began its environmental review process pursuant to NEPA (Trust 2003e). Using the PHSN district planning framework developed in the PTMP, the Trust defined a range of possible alternatives for the project. The range of alternatives was informed by early public input during the RFQ process and by the conceptual proposals offered by RFQ respondents.

Project scoping was announced in the Trust's bi-monthly newsletter mailed to about 17,000 persons and organizations, and in the Federal Register (68 Fed. Reg. 53205 September 9, 2003). The materials that were distributed are included in this EA as Appendix B and consisted of a project summary, a brief statement of the purpose and need for the project, a statement of the project objectives to be balanced, and a description of four conceptual alternatives proposed for study in the EA. The materials indicated that the EA would tier from the PTMP EIS.

Continuation of Leasing Process / Receipt of Proposals

Two teams elected to present proposals. The Forest City and John Stewart/Related Companies teams submitted their proposals on October 27, 2003, and presented them at a public Board of Directors meeting on October 29. The teams were directed to submit proposals consistent with the range of alternatives described in the scoping materials, and each did so.

The Forest City team submitted two proposals. The first would remove the non-historic wings of the PHSN, rehabilitate the historic portion of the building and other historic buildings for residential use, and construct new residential units in the northern portion of the PHSN district at Battery Caulfield. The second proposal would rehabilitate the PHSN, including its non-historic wings, for residential use without any new construction at Battery Caulfield. Forest City has identified the second proposal as its preference. The John Stewart/Related Companies proposal is similar to Forest City's preferred option, and would rehabilitate the PHSN while retaining the non-historic wings. The John Stewart/Related Companies proposal states that the team considered a project that removed the non-historic wings without replacing the lost square footage, and determined that it would not be financially feasible for them nor would it generate rent for the Presidio.²

Revision of EA Planning Alternatives Based on Leasing Proposals and Scoping Comments

The public scoping period, which was extended once and ended on December 10, 2003, lasted more than three months. The Trust held two public Board of Directors hearings for the public to offer its comments on the project and the scope of environmental review. The first hearing was on October 29, 2003 and the second was on December 10, 2003.

² In a later communication dated January 9, 2004, the John Stewart/Related Companies team revised this statement to indicate their belief that the smaller alternative would be financially feasible if Building 1801 were reused as leasehold condominiums.

By the close of scoping, the Trust had received about 250 written and oral comments. After carefully considering the public's comments and the proposals submitted, the Trust has revised the alternatives included in the August 27, 2003 scoping materials to those that are now being studied in this EA. Most notably, in response to public scoping comments and the developer proposals, the Trust has reduced the proposed unit count – or size – of Alternatives 2 and 4 by 10 to 20 percent.

The four EA alternatives are described fully in Section 2 of this EA. All alternatives would rehabilitate the PHSB and the adjacent historic buildings. Where they differ is in the amount and location of demolition and new construction, and in the total number and mix of residential units. The EA alternatives have been developed to encompass the range of proposals submitted by the two development teams as well as to reflect comments from the public. Alternative 2 would accommodate Forest City's preferred proposal or the John Stewart/Related Companies proposal; Alternative 3 reflects the smaller development alternative proposed by many who offered comments; and Alternative 4 would accommodate Forest City's non-preferred proposal, which would include new development at Battery Caulfield.

Identification of Preferred Alternative and Developer Selection

At their meeting of January 29, 2004, based upon the information and analysis in the EA and on all of the information in the record, the Trust Board of Directors identified Alternative 2 as the Trust's Preferred Alternative. At a subsequent meeting, the Trust Board of Directors will select the developer team with whom to enter exclusive negotiations for the project. The Board's selection of a developer does not indicate a commitment to approve or execute a project identical to the developer's physical proposal. Negotiations are expected to result in a project that falls within the range represented by the alternatives in Section 2 of this EA.

The Environmental Assessment Process

Following release of this EA, the Trust will solicit public input for 10 weeks and will hold one or more public meetings to receive oral comments on the EA and the PHSB project. The Trust will also begin negotiations with the selected developer and will use both the EA and the comments it generates to inform the specifics of the project and the development agreement and lease. No approvals will be granted and no lease or development agreement will be signed until the public comment period is over and the environmental review process is complete.

1 Purpose and Need

In accordance with the Presidio Trust Act, as amended (16 USC §§ 460bb appendix) and the PTMP, the Trust is proposing to introduce residential uses to the PHSB district and to undertake related site improvements. The project is intended to address the Trust's statutory requirements and the agency's mission, which is to preserve and enhance the cultural, natural, scenic, and recreational resources of the Presidio for public use in perpetuity while making the Presidio financially sustainable. This section describes the underlying purpose and need for the project or proposed action.

1.1 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the proposed PHSB project is: (1) to rehabilitate and reactivate the severely deteriorated historic buildings within the PHSB district, particularly the hospital building; (2) to protect the National Historic Landmark District (NHL) and other historic and cultural resources; (3) to address the health and safety risks to the Presidio and surrounding city neighborhoods from dilapidated and largely vacant buildings within the project site; (4) to improve the unsightly appearance of the existing unimproved landscapes within the project boundary; and (5) to generate revenue for the long-term enhancement of other Presidio resources, and for ongoing operation of the Presidio as a national park site. These purposes and the related need for the project are discussed in more detail below.

1.1.1 Rehabilitate and Reactivate Deteriorated and Unoccupied Historic Buildings

The dilapidated and vacant buildings on the PHSB project site pose both a land use and an aesthetic concern. The hospital building is entirely vacant and has been little used for about 20 years. Today, the building is fenced off and its surroundings either overgrown with weedy vegetation or lacking vegetation. The building's broken windows and dilapidated condition are obvious to the passerby. Many of the other buildings in the PHSB district are also unoccupied, some are currently boarded up, and most appear abandoned. Vacant buildings are subject to slow deterioration as well as vandalism and destruction of historic building materials. The magnitude of such destruction within the main hospital building can be seen on its interior (Figure 2) or by comparing its current condition to the conditions during a walk-through inspection by the U.S Army and the NPS in 1994 (NPS 2004a).

The project site's abandoned appearance is incompatible with its park setting. Trust staff members are often asked by members of the public to explain the visibly poor condition of the buildings such as the boarded up houses on Wyman Avenue, which can be seen from Park Presidio Boulevard and to a lesser extent from nearby Mountain Lake Park. The appearance of the entire south end of the PHSB district strikes most visitors as jarring. The overwhelming sense of decay and deterioration contrasts dramatically with scenic views to the west, natural areas to the west and north, and well-kept residential neighborhoods to the south.



Windows are boarded up after excessive glass-breaking.



Surrounded by a security fence, the building and landscape grow increasingly derelict.



Graffiti mars building interiors.



Vandals regularly break in and cause considerable damage.

1.1.2 Protect the NHL and Other Historic and Cultural Resources

The Presidio was designated a NHL in 1962, and the designation was updated in 1993. According to the 1993 update, the Presidio's "period of significance" dates from 1776 to 1945. Buildings and features within the NHL are considered "contributing" (to the NHL) if they were constructed during this period of significance and if they retain sufficient integrity. The 20 historic buildings within the PHS district total approximately 280,000 square feet, and most were built around 1932, when an earlier hospital complex on the site was replaced.¹ The project is needed to protect the integrity of the NHL and to preserve and rehabilitate the contributing historic buildings.

In addition to contributing buildings, the PHS district includes other character-defining structures, objects, and landscape features that need to be protected as part of the project. These resources are varied and include some open spaces, road alignments, and building orientations. There are also known archeological resources and possible undiscovered archeological resources that may lie buried in previously undisturbed areas of the PHS district.

Section 110 of the NHPA sets out the broad historic preservation responsibilities of federal agencies. Under Section 110(f), special provision is to be afforded to National Historic Landmarks like the Presidio, and agencies must "to the maximum extent possible, undertake such planning and actions as may be necessary to minimize harm" to a National Historic Landmark. Both the proposed rehabilitation of historic buildings and the proposed cultural landscape improvements are needed to meet the Trust's NHPA obligations, including Section 110(f).

1.1.3 Address Health and Safety Risks

Vacant and dilapidated buildings on the project site pose a health and safety risk and can be most effectively secured through rehabilitation and reuse. Vacant buildings at the site are spread out and difficult for the U.S. Park Police (USPP) – which provides the Trust's law enforcement services – to monitor effectively. As a result, vandalism is common and unauthorized individuals regularly enter the buildings, severely vandalizing the interiors. The vandalized buildings also show evidence of illicit drug use and unauthorized occupancy by the homeless, raising health and safety concerns due to the absence of power, water, or sanitation systems. During colder weather, there is always a possibility that unauthorized occupants will set fires for warmth, increasing the risk of building damage through uncontrolled fire.

Building vandalism and other property damage can spread from vacant buildings to the areas around them. Graffiti has become more of a problem in the section of the Presidio adjacent to Mountain Lake Park and the PHS district than in other areas of the park. Vandalism threatens the success of planned trails, trailheads, and scenic overlooks. Substantial investments in these improvements and in interpretive

¹ Eighteen buildings are being considered for reuse as part of the current project. Buildings 1451 and 1449 are not.

signs, natural areas, and landscape improvements would be unwise until nearby buildings are better secured.

The Trust and the USPP have taken and continue to take steps to reduce the incidence of break-ins and unauthorized use of vacant buildings within the PHSB district. The effectiveness of increased measures appears to have reached a plateau. Common sense suggests that activating vacant buildings or abandoned sites with residents and/or employees can improve security of a site and reduce vandalism, unauthorized entry, and related crime risks. Rehabilitating and activating buildings with occupants also slows or stops building deterioration.

1.1.4 Improve the Appearance of Existing Landscapes

Developed areas of the PHSB district are characterized by expansive asphalt parking areas and other hardscape, limited landscape buffers, and poorly maintained vegetation that is overgrown in some areas and sparse in others. The unkempt appearance of these areas is incompatible with an actively managed urban and national park setting, and contributes to its vacant and neglected aesthetic. The PHSB project is needed to improve the appearance and compatibility of parking and landscape areas and to complement planned remediation of old U.S. Army landfills, planned enhancement of natural areas, and planned construction of trails, bikeways, a trailhead, and a scenic overlook. The project is also needed to facilitate implementation of local circulation improvements, including changes to the configuration of Battery Canfield Road intended to discourage traffic that cuts through the park, and re-creation of the tree-lined entry drive that once extended from 14th Avenue to Building 1801.

1.1.5 Generate Revenue for Presidio Improvements and Operations

The proposed project is also needed to generate revenue. Under the Trust Act Section 104(o), the project must be consistent with the financial self-sufficiency mandate, which requires the Trust to manage the Presidio to become financially independent of annual federal appropriations by 2013. As federal appropriations decline annually, the Presidio becomes more dependent on other sources of funds to provide for its operating and capital needs. Lease revenues, derived primarily from the Presidio's residential and non-residential rents, are affected by economic swings. In the recent economic downturn, for example, the Trust has seen precipitous declines in non-residential rents and substantial declines in residential rents. The only certainty is that there will continue to be uncertainty in the real estate market, particularly in the non-residential area. It is therefore necessary that the Trust obtain a substantial and ongoing financial return from the PHSB district, one of the few significant opportunities to convert a previously non-residential complex into a residential facility that can generate stable residential income for the park.

Generating revenue from projects like the PHSB is also vitally important because annual appropriations to the Trust have been declining more rapidly than originally planned for. The Trust's 1998 Financial Management Program (FMP) set appropriation levels considered necessary at that time. These levels

have not been met, as illustrated in Table 1 below, and there is no guarantee that appropriations will continue to decline at a gradual rate given increasing demands on the federal budget.

Table 1. Presidio Trust Federal Appropriations, Fiscal Years 1999 to 2004 (in Millions of Dollars)

	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004
Presidio Trust Financial Management Program (FMP) Assumption	14.91	24.38	23.75	23.13	22.50	21.88
Presidio Trust Budget Request	14.91	24.40	23.75	23.13	22.50	21.88
President's Budget	14.91	24.40	23.40	22.40	21.33	20.70
Appropriation	14.91	24.40	23.40	23.13	21.33	
Less Rescission	-0.11	-0.17	-0.05		-0.14	
Special Transportation				1.00	1.00	
Total	14.80	24.23	23.35	23.13	21.19	
Difference Between Appropriations and Presidio Trust FMP Assumption	-0.11	-0.14	-0.40	0.00	-1.31	-1.18

Source: Presidio Trust 2003.

FY = Fiscal Year

The Presidio is a costly place to operate and maintain on a daily basis, and it has extraordinary needs for capital-intensive improvements. Despite a 25-percent reduction in Trust operating costs over the past two years, the cost of operating the Presidio is budgeted at \$38.4 million in Fiscal Year 2004 and is expected to grow steadily due to projected increased costs of security and maintenance over the next decade. In addition, necessary capital improvements to the former military post turned national park were estimated at \$589 million in the 2002 PTMP. Some of these capital improvements, such as rehabilitation of a subset of the Presidio's historic buildings, will result in increased revenue. Many of the improvements, however, will not generate revenue, but are nonetheless critical to the preservation and enhancement of the Presidio as a national park. These include rehabilitating many of the Presidio's historic buildings, rehabilitating the historic forest, enhancing the Tennessee Hollow watershed, recovering the San Francisco lessingia, creating or improving 49 miles of bikeways and trails throughout the Presidio, building a series of scenic overlooks such as Inspiration Point, improving Rob Hill campground, and enhancing the park's historic entries and landscapes. All of these are projects to which the Trust is committed, and all require substantial capital investments not presently available and not projected to be available in the near term unless the Trust can successfully implement some projects that do not simply pay for themselves, but also provide ongoing revenue.

The Trust has begun to address its capital investment needs by carrying out cost-cutting measures over the last two years and by starting a philanthropy program. But these efforts will not nearly meet the park's financial needs, and the Trust must also look to achieving full and fair financial returns on its leasing projects. This is because the Presidio's long-term future depends on its generating sufficient funds for both capital expenditures and ongoing operating costs. Simply put, if lease revenues are sufficient to cover only the necessary capital expenditures, the park cannot be maintained and operated for public use. Conversely, if lease revenues are sufficient to cover only operating costs, many buildings and landscapes of the Presidio will be neglected and planned capital improvements, including increases in open space, will become infeasible. The Presidio's necessary capital expenditures and operating costs, as well as the relationship between them, are discussed in Chapter 4 of the PTMP.

In 2003, the National Academy of Public Administration (NAPA), charged by Congress to provide an independent review of the Trust's accomplishments and challenges, identified a need to bolster the Trust's financial position in order to accommodate the funding needs of the park in the context of faster-than-anticipated declines in federal funding, likely economic down cycles, and potential increases in capital costs (NAPA 2004). The Academy suggests that Trust capital cost projections, particularly those related to forest restoration and the protection and enhancement of other non-revenue-generating park resources, may be understated. Therefore, the need for funds may be greater than anticipated. The Academy has underscored the importance of residential reuse as an important source of stable revenue, less prone to the vicissitudes of the real estate market than commercial uses, and has encouraged the Trust to take full advantage of opportunities to generate additional residential revenue.

The Trust believes that the PHSN project proposal is a project with revenue-generating potential, and that by generating rent by leasing buildings within the district, the Trust can make progress toward its statutory mandate and the PTMP's stated goals. Given this mandate and the PTMP's goals, the amount of revenue needed from the project cannot be overestimated. For the project to be desirable from a financial perspective, it should generate revenue in excess of amounts generated from recent interim (short-term) leases within the district when combined with the earning potential of the 12 conventional dwelling units on Wyman Avenue. Specifically, the Trust has received about \$600,000 annually from four interim (short-term) leases in the PHSN district within the recent past. In addition, if the Trust were to undertake rehabilitation of the 12 dwelling units on Wyman Avenue with its own resources, experience has shown that the Trust could generate approximately \$400,000 in total (net) revenue from these properties on an annual basis.

1.2 PROJECT OBJECTIVES

The Trust has set the following specific leasing objectives for the PHSN project and has expressed the desire that these objectives be met in balance with one another. Some of these objectives are drawn from Trust Act requirements and others reflect the land use plan and policies set forth in the PTMP. The Trust identified similar objectives in the RFQ and RFP issued to initiate the effort to secure a private development partner for the project.

1.2.1 Historic Resources

The Trust seeks to preserve the historic resources in the PSHH district that contribute to the Presidio's designation as a NHLHD. Preservation and rehabilitation of historic buildings within the district is an essential goal of the project, as is ensuring that physical changes are compatible with the NHLHD.

1.2.2 Revitalization and Reuse

The Trust seeks to reactivate the project site, to provide land uses that are consistent with the PTMP, and to improve the overall appearance of the area. Under the PTMP, residential use is the preferred use for Building 1801, with residential, educational, and other supporting uses elsewhere in the district. Public access to open spaces is to be preserved.

1.2.3 Traffic and Parking

The Trust seeks to limit traffic and parking demand related to reuse of the project site, and will require prospective tenants to participate in the Trust's transportation demand management program, which encourages alternatives to single-occupant automobile use. The project must include uses or programs that limit traffic and parking demand. Program elements may include use of paratransit, public transportation support, and other incentives and disincentives.

1.2.4 Financial Contribution

The Trust must become financially sustainable over the long term, and seeks a project that enhances the viability of the Presidio. Revenues support the Trust's congressional mandate to preserve and protect the Presidio for public use in perpetuity. The Trust, therefore, seeks to realize the full economic benefit of its large residential projects.

1.2.5 Design Quality and Environmental Sustainability

The Trust seeks high quality site planning and design, compatible with the NHLHD and surrounding neighborhoods, and seeks environmentally sustainable building design, materials, techniques, and construction practices.

1.2.6 Natural Resources

The Trust seeks to protect the undeveloped areas within and adjacent to the PSHH district. These areas shelter many important plant and wildlife habitats, including that of the San Francisco lessingia, a federally-listed endangered plant.

2 Alternatives

Four project alternatives are evaluated in this EA: three action alternatives and a no action alternative, as required by the NEPA. Each action alternative proposes different treatments for Building 1801 and different amounts of demolition and replacement construction. Similarities and differences among the alternatives are described in this section.

Under the NEPA, in this situation, the no action alternative is defined as the land use scenario analyzed in the PTMP EIS, with no demolition or new construction.¹ Information about existing conditions within the PHSB district is included in Section 3 of this EA, providing a basis of comparison between the action alternatives and a true “no project” scenario in which no changes are undertaken at the project site.

Alternative 2 is described as the proposed action or Preferred Alternative for the reasons expressed in Section 2.9, below. However, the characteristics of the alternative ultimately selected at the conclusion of the environmental review process may change as a result of public input regarding this EA and negotiations with the Trust’s private development partner(s). The selected alternative may combine various elements of the alternatives, or may fall within the range they represent.

The four alternatives described in detail below were developed and modified with the benefit of public input, as described in the Introduction. Some other alternatives requested by the public during the scoping process fall within the range represented by these EA alternatives (see Section 2.8, Other Alternatives, at the end of this section).

2.1 CHARACTERISTICS SHARED BY ALL ALTERNATIVES

All alternatives share some common characteristics provided by or derived from the PTMP’s policies, guidelines, and land use plans, including applicable mitigation measures in the PTMP EIS. Common characteristics include the following:

- The total square footage in the district after project implementation would not exceed 400,000 square feet, as stated in the PTMP, and the primary use of Building 1801 would be residential.
- A prerequisite of any proposed new construction would be the removal of at least an equivalent amount of existing square footage within the district. New construction, if any, may not exceed 130,000 square feet.
- The total number of residential units Presidio-wide would not exceed the maximum established in PTMP (1,654 units). For action alternatives that propose more residential units than the PTMP

¹ See Response to Question 3 in 46 Fed. Reg. 18026 March 23, 1981, as amended, 51 Fed. Reg. 15618 April 25, 1986. CEQ guidance provides that where there is an ongoing comprehensive management plan, the no action alternative is defined as continuing with the ongoing management plan.

envisioned for the PHS district, a reduction in the number of units permitted in one or more other planning districts is required.

- All alternatives would provide for the rehabilitation of the historic portion of Building 1801, and all action alternatives would include removal of the one-story loggia added in the 1950s, which blocks the central portion of the historic building's primary facade. Rehabilitation of Building 1801 and other historic buildings would comply with the Secretary of the Interior's Standards, and would utilize historic rehabilitation tax credits where applicable.
- Any new construction would be sited within the PHS district's previously developed areas and would be configured and designed to be compatible with the NHL. Site changes would also conform to planning district guidelines presented in Chapter 3 of the PTMP, and to the more specific Planning and Design Guidelines for the site included in draft form in Appendix A. These guidelines will be finalized prior to project implementation, following public review and consultation pursuant to the NHPA.
- Measures would be taken to protect significant native plant communities, endangered species, the natural resources within the Nike Swale, and the local California quail population. These measures are described more fully in Section 2.2, below.
- Additional (inbound) access to the site would be provided through the reopened 14th Avenue Gate. Fourteenth and 15th Avenues would operate as a one-way couplet as described in the PTMP, unless the Park Presidio Access Variant is approved by the California Department of Transportation (Caltrans). This option is described below in Section 2.7 as a possible complement to all action alternatives.
- Cut-through traffic on Battery Canfield Road would be minimized by reconfiguring the internal roads and parking area to the west of Building 1801.
- Transportation demand management actions would be implemented to reduce traffic as described in Section 2.2, below.
- All alternatives would allow for proposed bike and pedestrian trails within the district to connect with nearby local and regional trails as described in Section 2.2, below.
- Old U.S. Army landfills located within the district would be subject to remediation as part of the Trust's Presidio-wide environmental remediation program as described in Section 2.2, below.
- The Trust's waste transfer station behind Building 1801 would be relocated to the former Army transfer yard (across from Amatory Loop). The composting facilities at the western edge of the parking lot on the upper plateau would remain until a suitable new site can be found. Under all action alternatives, surface parking would be eliminated as a potential land use in this area.

- Existing tenants within the district, Arion Press and Lone Mountain Children's Center, would be accommodated in all alternatives.
- Finally, the former Nike Missile Site and the former Marine Hospital Cemetery on the upper plateau would be interpreted for visitors as described in Section 2.2, below.

2.2 RELATED ACTIVITIES COMMON TO ALL ALTERNATIVES

The alternatives are consistent with and would accommodate a number of ongoing and previously planned improvements within the PHS district. The nature and status of these improvements are described in this section, along with the agreements, plans, and policies from which they derive. These related activities are shown in Figure 3.

2.2.1 Remediation Activities

Through its Presidio-wide environmental remediation program, the Trust is assessing and addressing a number of environmentally contaminated sites in or near the PHS district pursuant to authority transferred from the U.S. Army and the NPS. All Trust remediation actions are planned and implemented in compliance with governing federal and state environmental cleanup laws, regulations, and environmental agreements that include enforceable requirements and schedules. The timing and implementation of remediation projects in and near the PHS district, which include a portion of Graded Area 9, the Nike Missile Site, the Nike Swale, Landfill 8, and Landfill 10, are being planned so as to be consistent and coordinated with the PHS project. The Trust plans to prepare remedy decision documents (i.e., Remedial Action Plans, known as RAPs) for the sites no later than 2004. The Trust's recommended remedies for these sites are subject to a legally required decision-making process that includes formal public notice, review, and comment. The remedies must be approved by the California Department of Toxic Substances Control (DTSC) and by the NPS before they can be implemented. The Trust anticipates that, once approved, remedies for the sites can be implemented no later than December 2005. A description of the conditions and regulatory status at each site follows.

Graded Area 9 "Landfill" – This remediation site is a low-lying area of fill created by the U.S. Army to construct a soccer field. With an estimated surface area of 150,000 square feet, the fill extends to a depth of about 5 to 6 feet with an estimated volume of 32,000 cubic yards. Sampling indicates no contaminants at the site that pose a risk to human health or the environment, and therefore no further remedial action at Graded Area 9 for soil or groundwater has been proposed.

Landfill 8 – Landfill 8 is about 28,000 cubic yards of soil and construction debris underlain by the former Marine Hospital Cemetery. The landfill is covered by an asphalt parking lot, soil, and tennis courts. The cemetery is believed to be below the fill material at a depth of about 9 to 10 feet, although graves may be shallower and intermingled with fill in places. Contaminants in the fill include metals, semi-volatile organic compounds (SVOCs), and pesticides. The environmental remedy for the site is currently being developed.

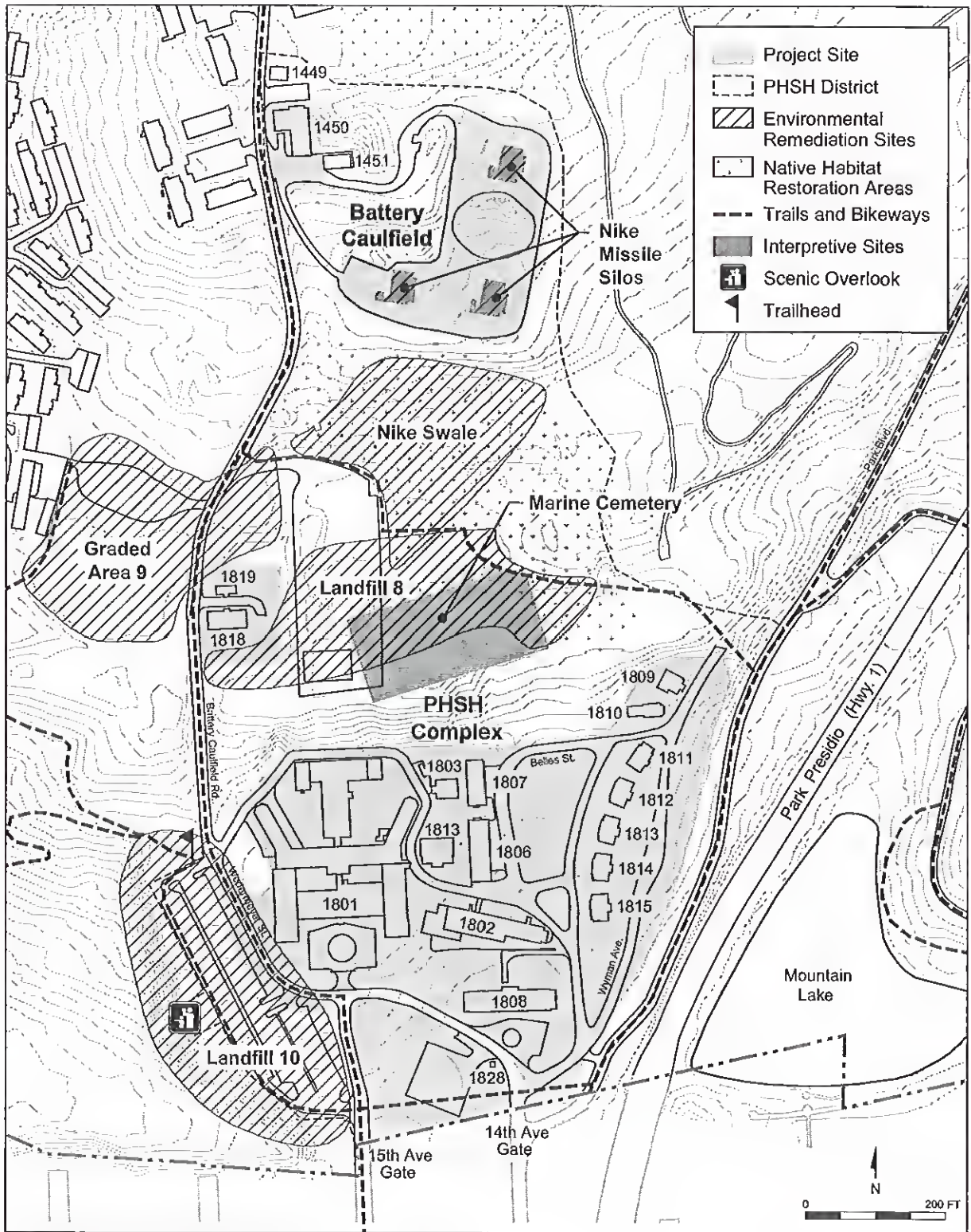


FIGURE 3. RELATED ONGOING ACTIVITIES

Source: Presidio Trust, 2003

Landfill 10 – Landfill 10, the Presidio’s largest landfill, contains about 140,000 cubic yards of soil, debris, and building demolition rubble. Groundwater quality is being monitored, and investigations of the site to determine slope stability under various seismic conditions and potential groundwater threats are nearly complete. The environmental remedy for the site is currently being developed. Alternatives being considered include excavation and use of a soil cover. The likely remedy will include cutting back the slope for site stabilization, and installation of erosion control measures. Consistent with land use planning for the PHSH district, a parking area will be included on a portion of the site.

Nike Missile Site – At the Army’s former Nike Missile facility, a series of subsurface storm drains are contaminated with metals and polynuclear aromatic hydrocarbons (known as PAHs). Groundwater sampling at the site has detected subsurface inorganic contaminants (i.e., metals). Cleanup is expected to include removal of contaminated sediments in the storm drains. Following implementation of remedial actions, groundwater monitoring will be required to confirm removal of contamination sources.

Nike Swale – This site, immediately south of the Nike Missile Site, is an area of riparian scrub vegetation, including native dune plants, willows, and seasonal wetlands, that receives runoff from the former missile facility. The site may be contaminated due to transport of substances along subsurface drains that surface adjacent to and within the swale area. Sampling indicates possible PAHs, polychlorinated biphenyls (PCBs), metals, and total petroleum hydrocarbons (TPH) in soil and sediment. The expected environmental remedy includes excavation of contaminated soil and sediments and confirmation soil sampling to verify source removal. Remediation of the site will be conducted in close coordination with natural resources staff of both the Trust and the NPS to avoid damaging resources at the site.

2.2.2 Protection of Natural Resources and Revegetation of Remediation Sites

Portions of the upper plateau of the PHSH district support remnant native habitat and associated rare plants that include coast live oak woodland, central dune scrub, and freshwater wetland, as well as the San Francisco lessingia, a federally listed endangered plant. The complex array of vegetation in this area and the area immediately north of the PHSH district also provides valuable habitat for the largest known California quail population in San Francisco, as well as other wildlife. According to the U.S. Fish and Wildlife Service (USFWS) recovery plan for the San Francisco lessingia (and other listed species not occurring within the district), the dune slope immediately behind Building 1801 that currently supports a stand of cypress trees serves as a buffer between the built (lower) and generally unbuilt (upper) portions of the district.

Pursuant to the adopted Presidio Vegetation Management Plan (VMP), the Trust and its partners will protect and restore these natural areas over time through the park’s stewardship program. Activities to date include creating brush piles (for use by California quail and other wildlife), removing invasive plants, planting native plants, collecting seeds, and monitoring wildlife and plants. Future actions will include revegetation of remediation sites including Graded Area 9, Landfill 8, portions of Landfill 10, and

the Nike Swale. Revegetation will utilize native plant species, and will be designed to enhance habitat values and contribute to the recovery of the San Francisco lyssingia.

In addition, the Trust will implement the appropriate mitigation measures in the PTMP EIS and recovery measures in the USFWS recovery plan, including minimizing changes to the local hydrology, limiting development to already built areas, continuing to separate the existing PHSB buildings from the upper plateau through the "Hospital Buffer," and restoring native vegetation suitable for the expansion of the San Francisco lessingia populations north of the buffer zone.

The PHSB district is sited on a ridge that drains west to Lobos Creek (the source of the Presidio's drinking water) and east to Mountain Lake, one of the few remaining natural lakes in San Francisco and one of the park's most significant natural resources. The Trust will provide for the continued health of the lake and quality of the drinking water supply by directing storm water runoff away from the adjacent watersheds, encouraging storm water infiltration, and other measures included as mitigation in the PTMP EIS.

2.2.3 Development of Trails and Bikeways

Following a four-year planning process, the Trust and the NPS adopted the Presidio Trails and Bikeways Master Plan in July 2003. The PHSB project would be compatible with and allow for improvements to existing trails and bikeways, and the development of new trail and bikeway corridors within the district consistent with this plan. The Juan Bautista de Anza National Historic Trail will be improved as a pedestrian trail along the southern and western boundaries of the site. Other key trail extensions will include the Lobos Creek Valley Trail to the west, the West Pacific/Mountain Lake Corridor to the north, the Park Boulevard Trail to the northeast, and City Bicycle Route #69 (following Battery Caulfield Road, Wedemeyer Street, and 15th Avenue). A scenic overlook and trailhead, which will include informational signs, bicycle racks, and possibly a restroom, is also proposed near the southwest corner of the site. The trail and bikeways improvements will provide a clear path system and signage, will link with surrounding destinations such as Mountain Lake and Lobos Valley, and will connect to the local and regional trails system.

2.2.4 Interpretation of Nike Missile Site and Former Marine Hospital Cemetery

Consistent with PTMP policies, both the Nike Missile Site and the former Marine Hospital Cemetery will be interpreted through wayside exhibits, signs, and/or memorials. Through historic photos and text, the Nike Missile Site exhibit will describe the site's interconnection with the other Nike sites in San Francisco and the Bay Area, and the design and mission of the entire Nike national missile defense system to provide a larger context for the Presidio's role in the Cold War era. The exhibit will also promote and direct visitors to the NPS reconstructed Nike site at Fort Barry in the Marin Headlands.

The former Marine Hospital Cemetery commemoration will honor those interred in the cemetery. The cemetery is thought to contain approximately 500 to 600 graves of seamen who had been treated in the adjacent hospital between 1885 until 1912.

2.2.5 Implementation of Transportation Demand Management Actions

With the PTMP, the Trust adopted an aggressive Transportation Demand Management (TDM) program to reduce overall reliance on the automobile. Tenants at the PHS district will participate in the park-wide TDM program components that are sponsored by the Trust, and will be required to develop their own complementing measures. The Trust's program includes the following measures:

- Parking management program, including a parking regulation and fee program;
- A clean-fuel shuttle bus serving the entire Presidio with direct connections to MUNI and Golden Gate Transit routes;
- Guaranteed ride home program, which provides "commuter insurance" for employees using alternative forms of transportation;
- Car sharing program to provide participants with access to a vehicle without having to own a car;
- Transit pass sales coordination, including transit pass sales;
- Employee transportation survey coordination and tabulation;
- Vanpool coordination;
- Website with a section dedicated to information on transportation and commute alternatives;
- Mandatory participation and commitment to trip-reduction requirements by all non-residential tenants;
- Transit and ridesharing information disseminated on kiosks within the park, the Presidio Trust's website, and employee orientation programs;
- Event-specific TDM programs for all special events;
- Periodic monitoring of traffic volumes and mode choice among Presidio residents and employees;
- Supplementing MUNI express bus service to regional transit connections (i.e., BART and the Transbay Terminal); and
- Secure bicycle parking.

2.3 ALTERNATIVE 1: PTMP OR NO ACTION ALTERNATIVE

Alternative 1, the PTMP or No Action Alternative, would rehabilitate buildings within the PHS district to accommodate residential and educational uses. There would be no demolition or new construction within the district, and the existing total building area of 400,000 square feet would remain in its current configuration, with the concentration of development on the lower plateau (Table 2). Battery Caulfield would continue to be used in the short term as a maintenance/corporation yard for Trust operations.² The

² Long-term uses, including active recreation or native plant habitat, could be considered in the future as a separate project.

historic portion of Building 1801 and its non-historic additions, including the seven-story end “wings,” would be rehabilitated for primarily residential use (approximately 200 units) together with the historic housing along Wyman Avenue (approximately 12 units). Some non-historic portions of Building 1801 would be used to accommodate an educational use or uses compatible with residential occupancy of the remainder of the building. Other buildings on the lower plateau would contain education-related and accessory uses. Ancillary buildings on the upper plateau, including Buildings 1818, 1819, and 1450, would be rehabilitated for a variety of office, educational, and supporting uses over time (Figure 4).

Table 2. Summary of Alternatives for the PHS Hospital Project

	ALTERNATIVE 1: PTMP OR NO ACTION ALTERNATIVE	ALTERNATIVE 2: INFILL ALTERNATIVE	ALTERNATIVE 3: NO INFILL ALTERNATIVE	ALTERNATIVE 4: BATTERY CAULFIELD ALTERNATIVE
Preservation of Historic Portion of Building 1801 and other Historic Buildings	Yes	Yes	Yes	Yes
Maximum Building Area	400,000 sf	400,000 sf	275,000 sf	362,000 sf
Proposed Uses within PHS Hospital Complex on Lower Plateau	Residential (up to 210 units) & Other Uses ^a (173,000 sf)	Residential (up to 337 units) & Other Uses ^a (28,000 sf)	Residential (up to 230 units) & Other Uses ^a (25,000 sf)	Residential (up to 192 units) & Other Uses ^a (28,000 sf)
Proposed Uses within Battery Caulfield and Existing Buildings ^b on Upper Plateau	Corporation Yard for Trust Operations (Existing Use) & Other Uses ^a (17,000 sf) within Existing Buildings	Corporation Yard for Trust Operations (Existing Use) & Residential (up to 13 units) & Other Uses ^a (2,000 sf) within Existing Buildings	Corporation Yard for Trust Operations (Existing Use) & Other Uses ^a (17,000 sf) within Existing Buildings	Residential (up to 64 units) within New Construction & Residential (up to 13 units) & Other Uses ^a (2,000 sf) within Existing Buildings
Underground Parking	No	Yes	No	No
Parking Spaces	708	475	330	233
Removal of Non-Historic “Wings” of Building 1801	No	May Include Removal of Two Top Levels of Wings	Yes	Yes
Maximum Demolition	0	48,000 sf	125,000 sf	116,000 sf
Maximum New Construction	0	48,000 sf	0	73,000 sf
Senior (Independent & Assisted Living) Units	0	0	0	155
Affordable Housing Units	0-42	0-70	0-46	0
Maximum Residential Units	210	350	230	269

Source: Presidio Trust 2003.

^a Other Uses = Mix of office/accessory uses and cultural/education-related uses. Include the retention of some existing tenants and Trust facilities.

^b Includes Buildings 1818, 1819, and 1450.

sf = square feet

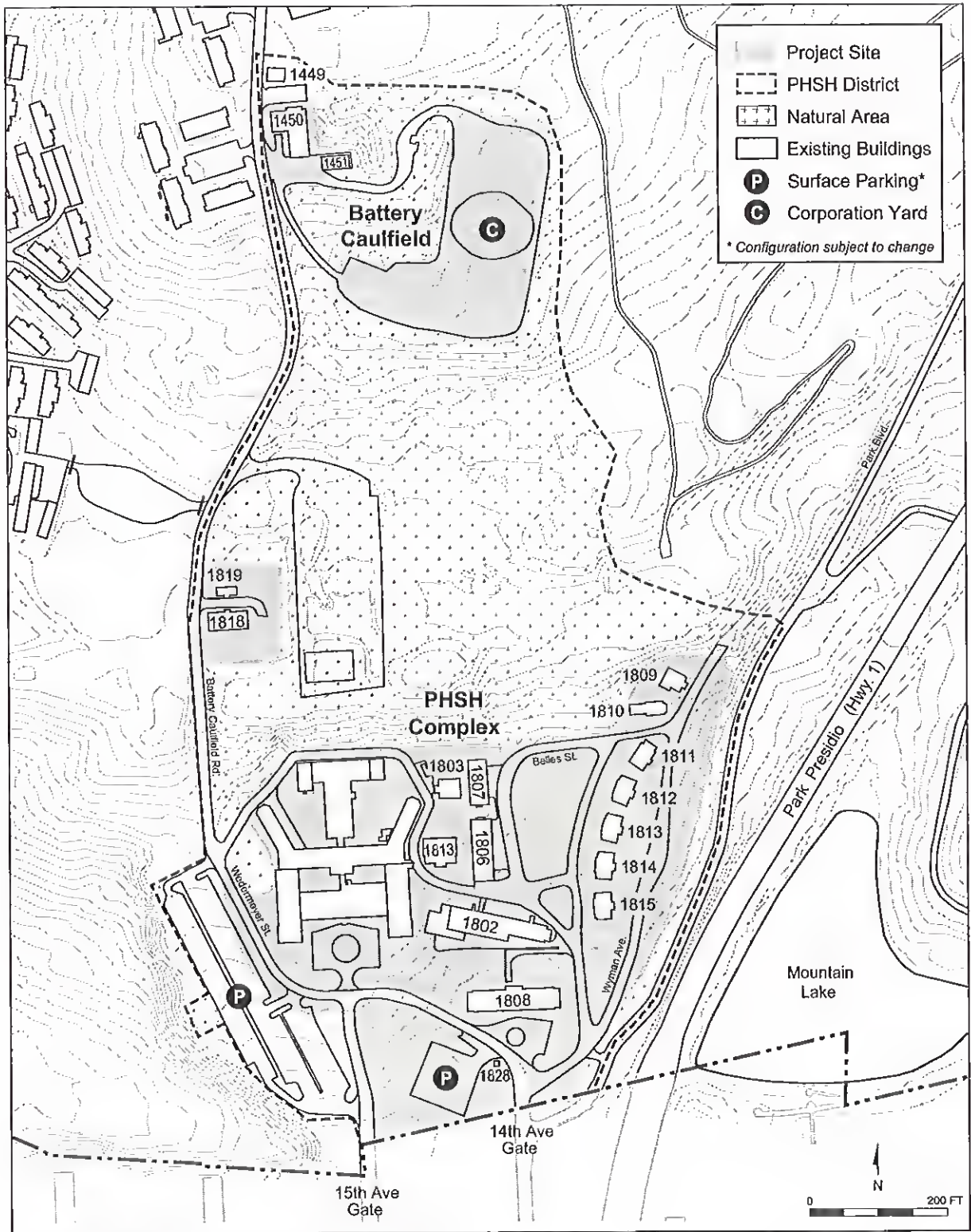


FIGURE 4. ALTERNATIVE 1: PTMP OR NO ACTION ALTERNATIVE

Source: Presidio Trust, 2003

2.3.1 Building Uses and Character

Historic and non-historic buildings within the PHSB district would be retained and rehabilitated to provide about 210 dwelling units and 190,000 square feet of non-residential (mostly educational) uses. Attention would be paid to repairing and restoring character-defining features of historic buildings and incorporating compatible adaptive uses into the buildings. Historic portions of Building 1801, along with housing along Wyman Avenue, would be rehabilitated for residential uses. Non-historic portions of Building 1801 would be used for a mix of educational and residential uses. Smaller historic structures in the district would be restored to their original design and character for cultural/educational and accessory uses. All existing non-historic buildings and additions would remain. Educational uses would include schools and/or community facilities offering educational and/or recreational programs.

2.3.2 Circulation and Parking

Road access and parking locations throughout the PHSB district would be reconfigured to ease flows, reduce auto traffic, and create a safer environment for pedestrians and residents. The 14th Avenue entrance would be reopened, and 14th and 15th Avenues would operate as a one-way couplet, providing access to and from the PHSB district and the City to the south. Roads within the site would be designed to discourage access to and from the north. However, Battery Caulfield Road would be retained for secondary access. Traffic-calming techniques would be used to slow traffic as it passes through the district. Parking and loading areas would be located to complement and minimize conflicts with adjacent areas. The large parking lot to the west of Building 1801 would be reduced in size due to remediation activities and other public access improvements. However, the parking lot on the upper plateau (now used for composting) would be reactivated in whole or in part. A total of 708 parking spaces would be provided in the district to serve proposed uses.

2.3.3 Landscaping

The alternative would incorporate plantings to better define historic open spaces and entry sequences. Landscape features and elements that would be enhanced include the hospital's front lawn and tree-lined entry roads, and the Wyman Avenue houses' landscapes and tree plantings. Landscape treatments would also be used to provide appropriate screening and visual buffers from surrounding areas.

2.3.4 Public Amenities and Access

The alternative would include amenities such as a café and restrooms for visitors. Connections to the surrounding network of trails and pathways would be made in accordance with the Presidio Trails and Bikeways Master Plan to link pedestrians and bicyclists with nearby local and regional trails and surrounding destinations such as the Presidio Golf Course, Mountain Lake, and Lobos Valley.

2.3.5 Existing Tenants

Arion Press and Lone Mountain Children's Center would remain as existing tenants in Buildings 1802 and 1806, respectively. The non-historic addition on Building 1802 may be rehabilitated for additional space.

2.3.6 Sustainability

The alternative would incorporate sustainable development and building practices consistent with the Trust's draft Green Building Guidelines. Examples of such measures would include energy conservation and efficiency strategies, indoor environmental and air quality management, and resource efficiency practices, such as construction waste management, storm water management, and water-efficient irrigation systems.

2.3.7 Construction

The duration of the building rehabilitation phase would be between two and three years, since the project may require multiple phases and development partners. The number of round trips taken by trucks onto the site is estimated to be about 1,300 during the course of rehabilitation. This represents an average of between two and three truck round trips per day, although the frequency of trips would fluctuate.

2.3.8 Financial Considerations

Alternative 1 would cost approximately \$67.0 million, not including site improvements outside the leasehold boundary such as the landscape and parking areas west of Building 1801 and utilities leading to the site. Total costs would be shared by the Trust and private development partner(s), with each party's share determined through negotiations.

Alternative 1 is financially feasible. The alternative could generate a minimum of \$1.0 million in annual base rent in 2008, the first "stabilized" year of project operation. Over the 75-year term of the lease, the alternative could generate in the area of \$323 million in total revenue to help fund preservation and enhancement of the Presidio's natural, cultural, scenic, and recreational resources.³

³To compare their revenue-generating potential, the alternatives were analyzed using a simplified and consistent set of financial assumptions, including the lease term, project financing, and the income potential of residential units of various sizes (Sedway Group/CBRE Consulting 2004). The alternative could generate more or less rent and total revenue if assumptions in the analysis were modified. For example, if the Trust's contribution to the project were increased, rents would also increase. Development and/or lease agreements negotiated for the project would determine the actual financial terms and revenue associated with the selected alternative.

2.4 ALTERNATIVE 2: INFILL ALTERNATIVE

Alternative 2, the Infill Alternative, would rehabilitate historic buildings within the PHSB district and would concentrate and locate development on the lower plateau for primarily residential use (up to 350 units total). Both the historic portion and non-historic wings of Building 1801 would be rehabilitated. Up to 48,000 square feet of non-historic buildings, including the front connector, two-story rear additions and possibly the top two stories of the non-historic wings of Building 1801, would be removed and replaced with an equivalent amount of compatible infill construction elsewhere on the lower plateau. In conformance with the PTMP planning district guidelines and the more specific draft Planning and Design Guidelines included here as Appendix A, compatible new construction would occur at the rear of Building 1801, on Belles Street (above the Central Green), and at the base of Wyman Avenue. No new buildings would be constructed at Battery Caulfield, which would remain in the short term as a Trust maintenance/corporation yard.⁴ Existing buildings on the upper plateau may be improved for residential and related uses (such as a community center) as part of the project, or may be rehabilitated by the Trust for non-residential uses over time. Square footage within the PHSB district would not exceed 400,000 square feet (Figure 5).

2.4.1 Building Uses and Character

Historic buildings within the district would be retained and rehabilitated. Non-historic buildings and existing additions would be substantially retained, but up to 48,000 square feet may be removed and replaced. Attention would be paid to repairing and restoring character-defining features and adapting the historic structures to new uses. Building 1801 would be converted into an apartment building, with a mix of studio and one- and two-bedroom apartments. The 1950s wings may be reduced in height by up to two stories. The exterior of the wings would be re-clad with materials in keeping with but distinct from the historic building. The non-historic central loggia would be removed. Two floors may be added to the rear central wing, which would remain lower in height than the main hospital building.

A new three-story apartment building would be built along the north edge of the Central Green on Belles Street. The massing and scale of the building would be modeled after nearby historic buildings but designed in a contemporary style.

The Wyman Avenue residences would be rehabilitated consistent with their original design and character and used as housing. The duplexes would remain as such, and the single-family homes would either continue as three-bedroom units or each be subdivided into two two-bedroom units. A new residential three-bedroom duplex may be built south of Building 1815 and designed in a style compatible with the group of nearby residences.

⁴ See footnote 2 above.

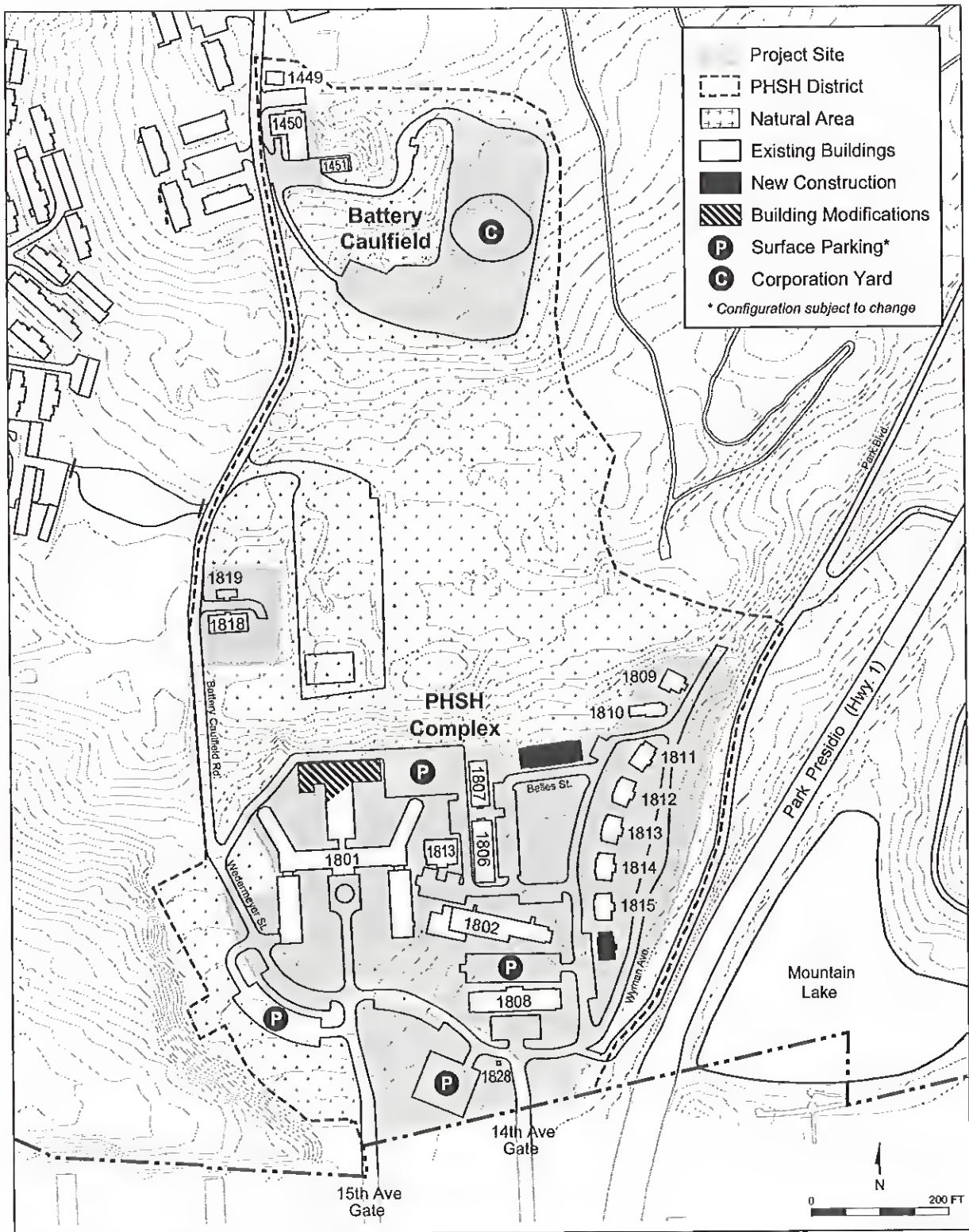


FIGURE 5. ALTERNATIVE 2: INFILL ALTERNATIVE

Source: Presidio Trust, 2003

Compatible new uses, primarily residential, would be included in the other historic buildings, and alterations to character-defining features or significant spatial configurations would be avoided.

2.4.2 Circulation and Parking

Fourteenth and 15th Avenues would operate as a one-way couplet, providing access to and from the PHSB district and the City to the south (unless the Park Presidio Access Variant is implemented as discussed in Section 2.7, below). Access to the district from other parts of the Presidio would continue along Battery Caulfield Road. Through-traffic would be discouraged, however, by reconfiguring the road west of the PHSB. Traffic-calming techniques would be used to slow traffic as it passes through the site.

Parking and loading areas would be located to complement and minimize conflicts with adjacent areas, and parking would be condensed on small lots convenient to building access points on the lower plateau. An underground parking garage with approximately 84 spaces would be located on the lower plateau below the courtyard between the wings of Building 1801. The parking lot to the west of Building 1801 would be reduced in size and reconfigured to discourage cut-through traffic on Battery Caulfield Road. The parking lot would be incorporated in the Landfill 10 site remedy. Depending on the size of this lot, a new parking lot may be developed between Buildings 1802 and 1808 to serve the residents of Building 1801. In the residential neighborhood surrounding the Central Green, parking spaces would be located in a combination of small garages in the new construction and small surface lots. On-street parking would be provided along many of the streets to accommodate visitors and guests. Alternative 2 would accommodate up to 475 spaces, including 457 on the lower plateau and 18 adjacent to Building 1450. The large parking lot on the upper plateau would not be reused.

2.4.3 Landscaping and Habitat Restoration

Alternative 2 would include a new landscape design compatible with the historic landscape of the district and with the VMP as amended. Major trees and significant stands that frame views and articulate open space would be retained. The existing entry drive to Building 1801 would be preserved, and the lawn in front of the building would reflect the historic character of the site while accentuating a well-defined entry court. The formal front lawn would be developed with paths and trees. The historic character of the Central Green and Wyman Avenue residences would be maintained with lawns and trees.

Trees would be planted near the south entrance to the project to create a buffer between the project and the adjacent residential area. Dune scrub vegetation would be planted in the area west of the reconfigured parking lot along the west side of the project. The woodland area to the east of the Wyman Avenue residences along Park Presidio Boulevard would be enhanced. Landscaping within the district would not include use of invasive non-native species that could compete with sensitive plant species on the upper plateau.

2.4.4 Public Amenities and Access

Alternative 2 would include outdoor amenities, a recreation center, and a small retail outlet (convenience store, coffee shop, dry cleaner counter, etc.) in Building 1805 to serve the project and nearby neighborhood. The alternative also assumes improvements to existing and proposed trails, including the Juan Bautista de Anza National Historic Trail, the West Pacific/Mountain Lake Corridor, and the Lobos Creek Valley Trail, to improve bicycle and pedestrian circulation and connect the Presidio trail system to the existing regional network in accordance with the Presidio Trails and Bikeways Master Plan.

2.4.5 Existing Tenants

Arion Press and Lone Mountain Children's Center would remain as existing tenants in Buildings 1802 and 1806, respectively. The non-historic addition on Building 1802 may be either removed or rehabilitated for additional space. The program at the Lone Mountain Children's Center may be expanded by including Building 1805.

2.4.6 Sustainability

The alternative would incorporate sustainable development and building practices. The "Green Building" measures would be consistent with the Trust's draft Green Building Guidelines and would qualify for a Leadership in Energy and Environmental Design (LEED) rating, indicating a high level of sustainable design. Examples of such measures would include energy conservation and efficiency strategies, indoor environmental and air quality management, and resource efficiency practices, such as construction waste management, storm water management, and water-efficient irrigation systems.

2.4.7 Construction

The duration of the construction phase would be between 22 and 24 months, potentially excluding rehabilitation of Buildings 1450, 1818, and 1819, which could be deferred to a later date. The number of round trips taken by truck onto the site is estimated to be up to 4,000 during the course of construction. Approximately 40 to 50 percent of these trips would be related to excavation for and construction of underground parking. The total represents an average of about five to eight truck round trips per day. The frequency of trips would fluctuate, however, with the most trips (as many as 50 round trips per day) occurring during demolition and excavation. Trips are expected to decrease during concrete construction and again during construction of the interiors. On-site reuse of demolition debris, which would reduce the number of truck trips during that phase, would be explored.

2.4.8 Financial Considerations

Alternative 2 is financially feasible. It would cost approximately \$84.8 million, not including site improvements outside the leasehold boundary such as the landscape and parking areas west of Building

1801 and utilities leading to the site. Total costs would be shared by the Presidio Trust and private development partner(s), with each party's share determined through negotiations.

Alternative 2 could generate a minimum of \$1.0 million in annual base rent in 2008, the first stabilized year of project operation. Over the 75-year term of the lease, the alternative could generate in the area of \$253 million in total revenue to help fund preservation and enhancement of the Presidio's natural, cultural, scenic, and recreational resources.⁵

2.5 ALTERNATIVE 3: NO INFILL ALTERNATIVE

Alternative 3, the No Infill Alternative, would rehabilitate historic buildings within the PHSB district, remove the non-historic wings of Building 1801 and other non-historic buildings and additions, and provide no replacement construction at Battery Caulfield or elsewhere within the district. Total square footage in the district would decrease to about 275,000 square feet. Buildings would be rehabilitated for primarily residential use (up to 230 units). The Battery Caulfield site would remain in the short term as a Trust maintenance/corporation yard.⁶ Outlying buildings would continue to serve as Trust maintenance facilities in the short term, and would be rehabilitated for non-residential uses over time (Figure 6).

2.5.1 Building Uses and Character

Historic buildings within the district would be retained and rehabilitated. Attention would be paid to repairing and restoring character-defining features and adapting the historic structures to new uses. Building 1801 would be converted into an apartment building, with a mix of studio and one-bedroom apartments. The Wyman Avenue residences would be rehabilitated consistent with their original design and character and used for housing. New uses, primarily residential, would be included in the other historic buildings, and character-defining features or original spatial configurations would be preserved.

2.5.2 Circulation and Parking

Fourteenth and 15th Avenues would operate as a one-way couplet, providing access to and from the PHSB district and the City to the south (unless the Park Presidio Access Variant is implemented as discussed in Section 2.7, below). Roads within the site would be designed to discourage cut-through traffic, with Battery Caulfield Road retained for secondary access. Traffic-calming techniques would be used to slow traffic as it passes through the district. Parking and loading areas would be located to complement and minimize conflicts with adjacent areas. The large parking lot on the upper plateau would not be reused. The parking lot to the west of Building 1801 would be reduced in size in coordination with remediation activities and public access improvements. A total of 330 parking spaces would be provided to serve proposed uses.

⁵ See footnote 3 above.

⁶ See footnote 2 above.

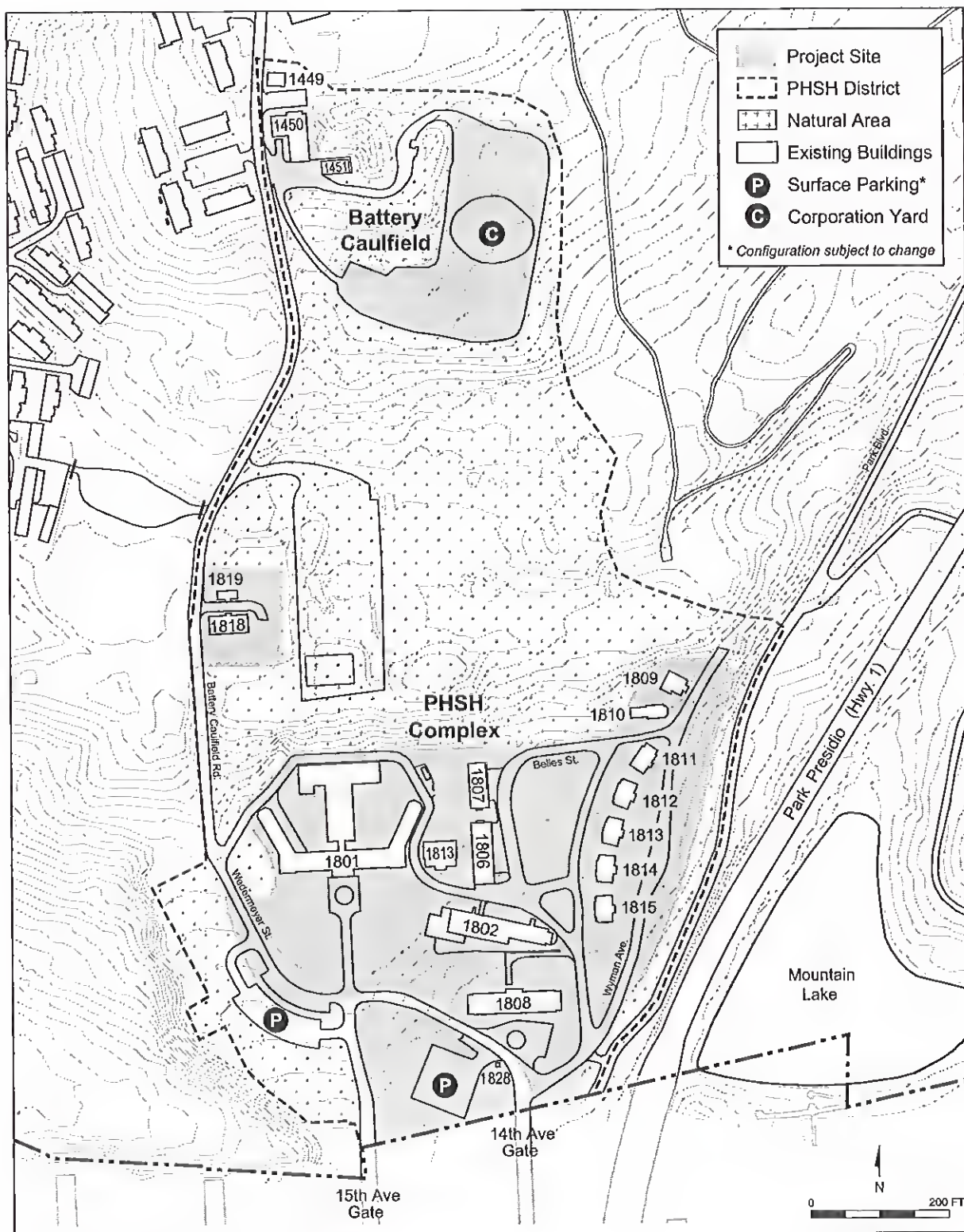


FIGURE 6. ALTERNATIVE 3: NO INFILL ALTERNATIVE

Source: Presidio Trust, 2003

2.5.3 Landscaping and Habitat Restoration

The alternative would incorporate plantings to better define historic open spaces and entry sequences. Landscape features and elements that would be enhanced include the hospital's front lawn and tree-lined entry roads and the Wyman Avenue houses' landscapes and tree plantings. Landscape treatments would also be used to provide appropriate screening from surrounding areas.

2.5.4 Public Amenities and Access

The alternative would include amenities such as a café and restrooms for visitors in Building 1805. Important trails that intersect in the district would be improved to connect to the network of nearby local and regional trails. These trails include the Juan Bautista de Anza National Historic Trail, the West Pacific/Mountain Lake Corridor, and the Lobos Creek Valley Trail.

2.5.5 Existing Tenants

Arion Press and Lone Mountain Children's Center would remain as existing tenants in Buildings 1802 and 1806, respectively.

2.5.6 Sustainability

The alternative would incorporate sustainable development and building practices consistent with the Trust's draft Green Building Guidelines. Examples of such measures would include energy conservation and efficiency strategies, indoor environmental and air quality management, and resource efficiency practices, such as construction waste management, storm water management, and water-efficient irrigation systems.

2.5.7 Construction

The duration of the building rehabilitation phase would be approximately 17 months, possibly excluding Building 1450 and other outlying buildings (see Alternative 2 above). The number of round trips taken by trucks onto the site is estimated to be about 1,580 for demolition and 540 during the course of rehabilitation. This represents an average of about five truck round trips per day, although the frequency of trips may fluctuate. On-site reuse of demolition debris, which would reduce the number of truck trips during that phase, would be explored.

2.5.8 Financial Considerations

Alternative 3 is financially feasible. It would cost approximately \$55.0 million, not including site improvements outside the leasehold boundary such as the landscape and parking areas west of Building

1801 and utilities leading to the site. Total costs would be shared by the Presidio Trust and private development partner(s), with each party's share determined through negotiations.

Alternative 3 could generate a minimum of \$1 million in annual base rent in 2008, the first stabilized year of project operation. Over a 75-year lease term, the alternative could generate in the area of \$207 million in total revenue to help fund preservation and enhancement of the Presidio's natural, cultural, scenic, and recreational resources.⁷

2.6 ALTERNATIVE 4: BATTERY CAULFIELD ALTERNATIVE

Alternative 4, the Battery Caulfield Alternative, would rehabilitate historic buildings within the PHSB district, and remove the non-historic wings of Building 1801 and replace them with new construction at Battery Caulfield. The alternative would include a mix of senior housing (age-restricted independent living), assisted living facilities, and conventional dwelling units at the lower plateau, and conventional dwelling units at Battery Caulfield. Rehabilitation of the historic buildings, including a portion of Building 1801, would accommodate approximately 192 units. Several non-historic buildings totaling 116,000 square feet, including Building 1803 and the wings and connector in front of Building 1801, would be removed and replaced with about 73,000 square feet of compatible new residential construction, including a 14,000-square-foot building (14 units) on Belles Street above the Central Green within the lower plateau, and 56,000 square feet within Battery Caulfield (up to 64 units) (Figure 7). Building area in the district would not exceed 362,000 square feet.

2.6.1 Building Uses and Character

Historic buildings within the PHSB district would be retained and rehabilitated for new uses, with attention paid to preserving character-defining features. Building 1801, with 125 units, would be converted into housing for independent seniors, and would include studios and one- and two-bedroom apartments equipped with small kitchens. Building 1808 would be renovated as an assisted living residence with 30 units. With the exception of Buildings 1802 and 1806, which would accommodate Arion Press and Lone Mountain Children's Center, and Building 1819, which would be converted into an art studio for local residents, all remaining buildings in the district would accommodate residential uses.

A new three-story apartment building would be built along the north edge of the Central Green on Belles Street. The massing and scale of the building would be modeled after nearby historic buildings, but it would be contemporary in design.

The existing Wyman Avenue residences would be rehabilitated consistent with their original design and character. Buildings 1809 and 1810 would be subdivided, retaining original fenestration on the exterior with alterations to the interior to accommodate the additional units.

⁷ See footnote 3 above.

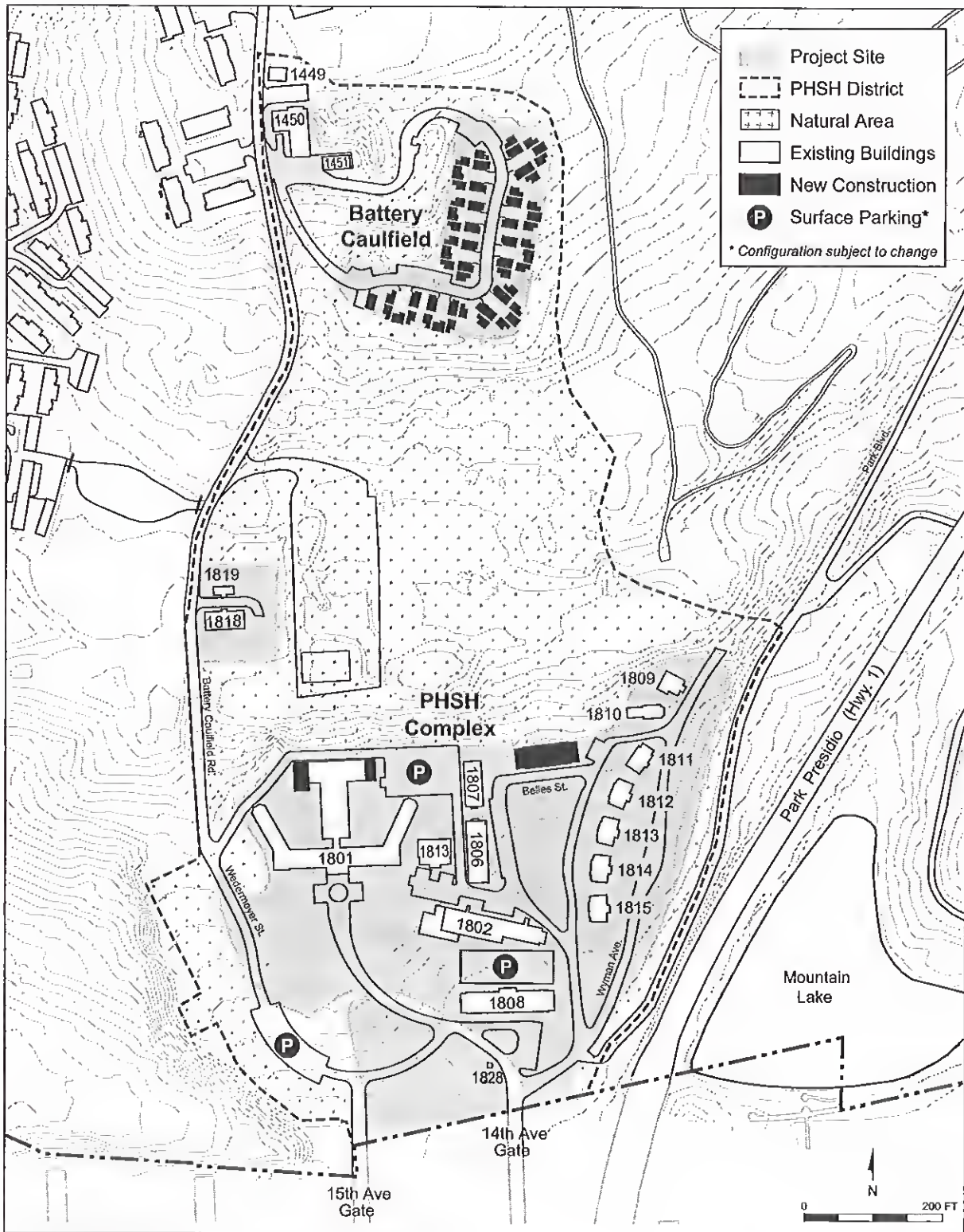


FIGURE 7. ALTERNATIVE 4: BATTERY CAULFIELD ALTERNATIVE

Source: Presidio Trust, 2003

The character of housing proposed for construction at Battery Caulfield would be distinct from that of the lower plateau. The two-story buildings would be similar in scale to the existing Wyman Avenue duplexes and designed to look like single residential structures. Housing would be clustered along a loop road that winds along the sloping site.

2.6.2 Circulation and Parking

Fourteenth and 15th Avenues would operate as a one-way couplet, providing access to and from the PHS district and the City to the south (unless the Park Presidio Access Variant is implemented as discussed below). The 14th Avenue entrance road would be reconstructed to recreate the historic entry road alignment. Wedemeyer Street would be re-routed farther south, creating a new intersection and left turn intended to reduce cut-through traffic.

Parking would be condensed on small lots convenient to building access points on the lower plateau. The large parking lot on the upper plateau would not be reused. The lot to the west of Building 1801 would be downsized and reconfigured to discourage cut-through traffic on Battery Caulfield Road. The parking lot adjacent to the 14th Avenue Gate would be eliminated. Senior parking would be located near building entries in surface lots to the rear of Building 1801 and between Buildings 1802 and 1805. In the residential neighborhood surrounding the Central Green, parking spaces would be located in a combination of small garages in the new construction and small surface lots. On-street parking would be provided along many of the streets to accommodate visitors and guests. Parking within Battery Caulfield would be accommodated mostly in the buildings themselves. Guest parking would be provided by on-street parking spaces along the loop road leading to the buildings. Alternative 4 would include up to 233 spaces, consisting of 132 on the lower plateau and 101 on the upper plateau (including Buildings 1818 and 1819).

2.6.3 Landscaping and Habitat Restoration

Alternative 4 would include a new landscape design compatible with the historic landscape of the district and with the Presidio VMP as amended. Major trees and significant stands that frame views and articulate open space would be retained. The lawn in front of Building 1801 would reflect the historic character of the site while accentuating a well-defined entry court. The formal front lawn would be developed with paths and trees. The historic character of the Central Green and Wyman Avenue residences would be maintained with lawns and trees. The landscape design at Battery Caulfield would incorporate native plants compatible with the surrounding natural vegetation.

Trees would be replanted near the south entrance to the project to create a buffer between the project and the adjacent residential area. Dune scrub vegetation would be restored in the area west of the reconfigured parking lot along the west side of the project. The woodland area to the east of the Wyman Avenue residences along Park Presidio Boulevard would be improved. Landscaping within the district would not include use of invasive non-native species that could compete with sensitive plant species on the upper plateau.

2.6.4 Public Amenities and Access

The alternative would include a recreation center and district- and neighborhood-serving retail spaces in Building 1805, including a small convenience store, a coffee shop, and a pick-up/drop-off dry cleaning counter. The recreation center would provide wellness programs for seniors and residents of the surrounding community. The alternative also assumes key trail extensions to segments of the Juan Bautista de Anza National Historic Trail, the West Pacific/Mountain Lake Corridor, and the Lohos Creek Valley Trail that would connect with the existing regional network and other key features of the Presidio in accordance with the Presidio Trails and Bikeways Master Plan.

2.6.5 Existing Tenants

Arion Press and Lone Mountain Children's Center would be retained as tenants in Buildings 1802 and 1806, respectively. The non-historic addition on Building 1802 may be either removed or rehabilitated for additional space.

2.6.6 Existing Battery Caulfield Uses

The Trust's building and landscaping materials at the Battery Caulfield corporation yard would be consolidated and moved to Battery Dynamite in the Fort Scott area. NPS use of the yard for equipment and materials would be eliminated.

2.6.7 Sustainability

The alternative would incorporate sustainable development and building practices. The "Green Building" measures would be consistent with the Trust's draft Green Building Guidelines and would qualify for a LEED rating. Examples of such measures would include energy conservation and efficiency strategies, indoor environmental and air quality management, and resource efficiency practices, such as construction waste management, storm water management, and water-efficient irrigation systems.

2.6.8 Construction

The duration of the construction phase would be about 20 months. The number of round trip truck trips onto the site is estimated to be approximately 2,200 during the course of construction, with an average of about five truck round trips per day for the 20-month duration. The frequency of trips would fluctuate, with the most trips (up to 20 truck round trips per day) occurring during demolition and excavation. Trips are expected to decrease during concrete construction and decrease more during construction of the interiors. Reuse of demolition debris on-site, which would reduce the number of truck trips during that phase, would be explored.

2.6.9 Financial Considerations

Alternative 4 is financially feasible. It would cost approximately \$75.6 million, not including site improvements outside the leasehold boundary such as the landscape and parking areas west of Building 1801 and utilities leading to the site. Total costs would be shared by the Presidio Trust and the private development partner(s), with each party's share determined through negotiations.

Alternative 4 could generate a minimum of \$1.0 million in annual base rent in 2008, the first stabilized year of project operation. Over the 75-year term of the lease, the alternative could generate in the area of \$274 million in total revenue to help fund preservation and enhancement of the Presidio's natural, cultural, scenic, and recreational resources.⁸

2.7 PARK PRESIDIO ACCESS VARIANT

Under Alternatives 2, 3, and 4, vehicular access to the site could be altered with approval and construction of a new intersection on Park Presidio Boulevard (Highway 1). Because this intersection would require approval by Caltrans, which has yet not been secured, the intersection is described and evaluated in this environmental assessment as a "variant" of the action alternatives. The Trust strongly supports this variant and has requested Caltrans' support.

The Park Presidio Access Variant would construct a new signalized intersection approximately 400 feet north of the current intersection of Lake Street and Park Presidio Boulevard (Figure 8) and would make operational changes to 14th and 15th Avenues. Internal Presidio roadways (e.g. Wyman, Brown) would be reconfigured in the immediate vicinity to accommodate these changes.

The new intersection would allow traffic traveling southbound on Park Presidio Boulevard to enter the PHS site directly via a right turn, and would provide virtually all traffic exiting the PHS site with direct access to northbound or southbound Park Presidio Boulevard.⁹ Rather than operating as they do today, or as a one-way couplet as proposed in the PTMP and Alternative 1, the 14th and 15th Avenue Gates would both allow inbound (northbound) Presidio access only.

Installation of a traffic signal would not require widening of Park Presidio Boulevard but would require reconfiguration of traffic lanes in two ways. First, in the northbound direction, the existing three-lane configuration north of Lake Street would be extended about 350 feet and through the new intersection, so that traffic in the right-hand lane would have a total of about 600 feet before merging left. Second, in the southbound direction, the three-lane configuration that currently begins about 200 feet before Lake Street would begin about 400 feet earlier, and before the new intersection. These changes in lane configuration would effectively extend existing non-standard highway conditions, wherein traffic uses the full width of the roadway without provision of standard shoulders. Sign and lighting changes on the highway and

⁸ See footnote 3 above.

⁹ While Wedemeyer Street and Battery Caulfield Road would still permit some traffic exiting the project site to travel north through the Presidio, changes to the configuration of these roads at the site are proposed to slow traffic and discourage their use by motorists heading to the Golden Gate Bridge.

within the Presidio would be required. In addition, some grading would be required within the Presidio, and the retaining wall on the west side of Park Presidio Boulevard could require modification.

Operationally, no pedestrian or bicycle use would be permitted at the new intersection. Pedestrian and bicyclists would continue to be accommodated via the exclusive multi-use trail that connects the PHSB district to Mountain Lake Park under Highway 1, or at Lake Street (SF Bicycle Route No. 10). The new intersection would act as a transition point between the free-flow conditions of Highway 1 and the signalized Park Presidio Boulevard. In providing this transition point, the new intersection would improve pedestrian and bicycle safety at Lake Street because traffic would be slowed by the new traffic signal before it reached the bike lanes along Lake Street or the Park Presidio crosswalk.

The cost of the Park Presidio Access Variant has been estimated at around \$1 million, and could be shared by the Trust and its private development partner(s). Further discussion of operational issues associated with this variant is included in the Transportation discussion in Section 3.2 of this document.

2.8 OTHER ALTERNATIVES

A number of other alternatives have been suggested for the PHSB district since the hospital closed in 1981, and a number of additional alternatives were requested during the scoping process for this EA. The following section briefly summarizes these other alternatives. In each case, the text indicates whether the alternative has been eliminated from detailed examination, and if so why. Where requested alternatives are being considered, the text explains how they fall within the range of alternatives that are being reviewed in this EA.

2.8.1 Alternatives Suggested Pre-1989

In 1988, a year before the decision was made to close the Presidio as an Army post but seven years after the Public Health Service vacated the site, the CCSF received a ten-year lease option on the PHSB property from the U.S. Army. At that time, a study was prepared for the CCSF to determine the feasibility of converting the PHSB into a long-term treatment facility for AIDS patients. The result of the study was the “Reactivation Plan” submitted in 1990 (Fong & Chan Architects).

Ultimately, the CCSF declined to exercise its lease option for the PHSB, presumably because the Reactivation Plan concluded that the costs of seismic upgrade of the facility for acute health care would be substantial. More recent suggestions that the PHSB buildings be used for medical purposes have been rejected for similar reasons. In addition, medical use is inconsistent with both the 1994 NPS management plan for the Presidio and the subsequent PTMP adopted in 2002.

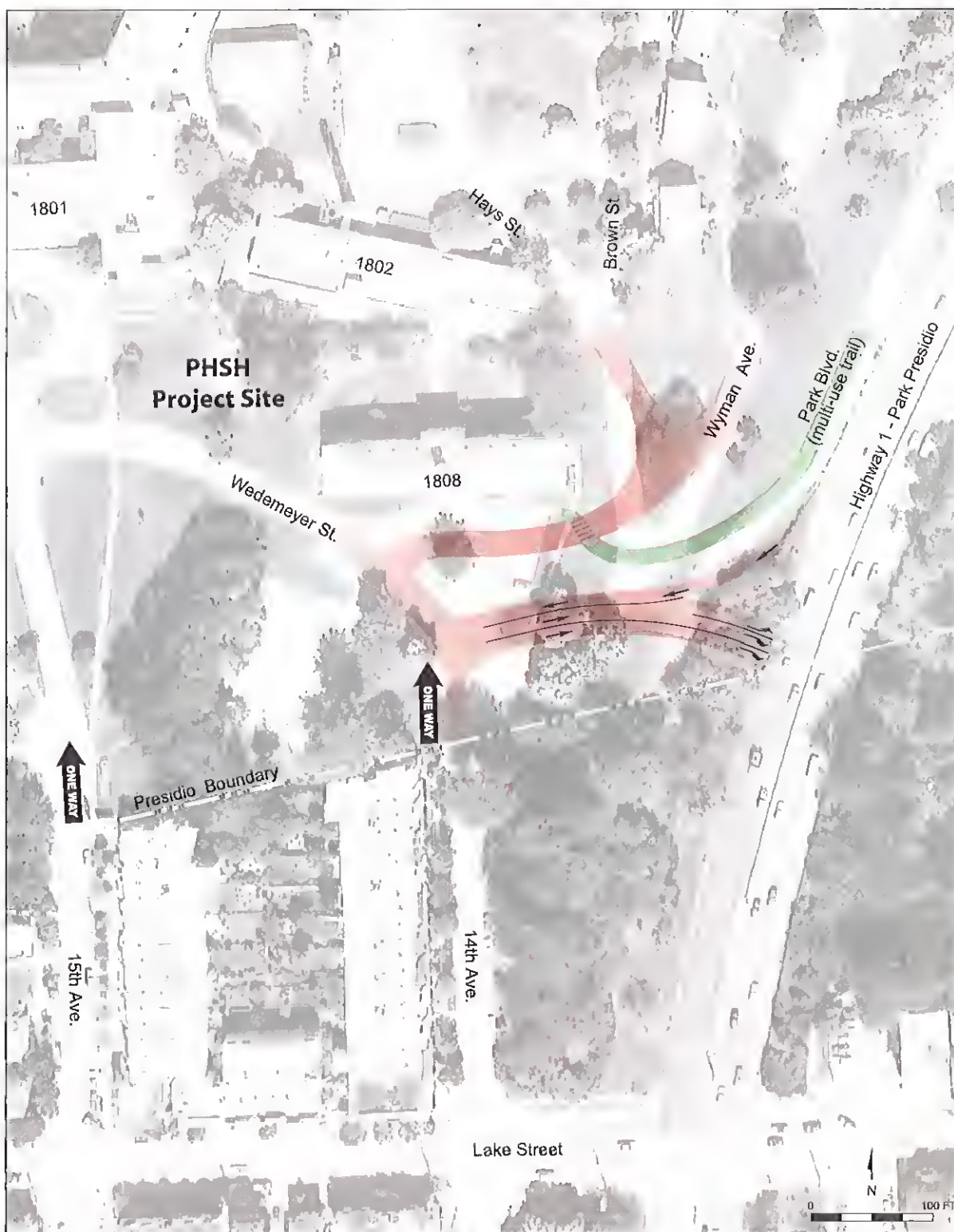


FIGURE 8. PARK PRESIDIO ACCESS VARIANT

Source: Presidio Trust, 2003

Table 3. Existing and Projected Housing Demand at the Presidio

	2002-2003	PTMP 2020
Presidio Based Employees (PBE)	2,250 employees	6,886 employees
Total Housing Demand ^a	1,440 units	4,406 units
Occupancy / Demand for Presidio Housing by PBE ^b	245 units	1,486 units

Source: PTMP EIS 2002 and Trust 2003 residency data.

^a Total Housing Demand = employees ÷ 1.563 employed residents per household

^b 2020 demand assumes 1.25 Presidio employees per household

The Plan establishes a maximum housing supply of 1,400 to 1,654 residences park-wide, despite fluctuations expected as a result of housing removal and other activities. The PTMP EIS projects that the Plan would result in approximately 1,295 conventional dwelling units and 352 dormitory style units in the year 2020 after planned housing removal and replacement. A maximum of 200 to 210 overall units was established for the PHS district.

The conversion of non-residential buildings to residential use was identified as an important strategy for replacing housing that will be removed over time to achieve natural resources goals of the Plan. This type of conversion was also identified as an historic preservation strategy:

Rehabilitating and converting historic non-residential buildings to residential use may prove to be an excellent historic preservation strategy regardless of the demand for housing by Presidio-based employees. For example, residential use may be the best way to ensure that historic portions of the Public Health Service Hospital are sensitively rehabilitated. For that reason, senior housing or other residential uses are preferred for the hospital building (PTMP, page 43).

3.1.1.5 Existing and Projected Future School Enrollment

In 2000, there were 128 school-age children residing at the Presidio. Because the Presidio is under exclusive federal jurisdiction, it does not provide property tax revenue for the San Francisco Unified School District (SFUSD), which serves the area. In order to offset the absence of tax revenue, the federal government established the School Impact Aid Program, administered by the U.S. Department of Education. Under this program, school districts can receive compensation for non-military students living on federal property. In fiscal year 2000, the SFUSD received approximately \$67,000 from the School Impact Aid Program for all federal facilities in San Francisco.

School enrollment by Presidio residents is expected to increase over time, based on the projected increase in residential population. In 2020, this population is projected to reach 3,240, with 125 elementary school pupils, 63 middle school pupils, and 86 high school pupils, for a total school enrollment of 274.

3.1.2 ENVIRONMENTAL CONSEQUENCES

The potential impacts of development within the Presidio on land use and socioeconomic conditions are assessed on pages 269 to 292 and 296 to 298 of the PTMP EIS. The sole impact identified within the PHSB district is a change in activity levels, given the district's underutilized condition. The PTMP EIS analysis is supplemented here, by analysis of the issues specific to the alternatives being considered for the PHSB project.

3.1.2.1 Alternative 1: PTMP or No Action Alternative

The rehabilitation and reuse of buildings within the PHSB district under Alternative 1 would increase activity levels as described in the PTMP EIS. The PHSB would be used primarily as residential apartments, although some educational use would also be included in the building. Educational uses such as schools would also fill the accessory buildings on the site, except for the residential buildings along Wyman Avenue, which would be rehabilitated for residential use (see Table 4 for a land use comparison of the alternatives).

Table 4. Projected Land Use, Population, and Employment at the PHSB District by Alternative

ALTERNATIVE	TOTAL DWELLING UNITS		SENIOR UNITS	POPULATION		EMPLOYMENT		
	STUDIOS & 1 BR	2+ BR		ADULT	SCHOOL-AGE	NON-RESIDENTIAL USES (SF)	JOBS	HOUSING DEMAND (DWELLING UNITS)
Alternative 1	198	12	0	480	70	190,000	140	90
Alternative 2	300	50	0	800	110	30,000	25	16
Alternative 3	218	12	0	525	75	42,000	20	13
Alternative 4	167	102	155	395	55	30,000	>20	>13

Source: Presidio Trust 2002b. Derived from PTMP EIS assumptions regarding employment density and housing demand.

Household size = 2.6 persons per unit, 1 per senior unit.

School-age population = 12.2%.

BR = bedrooms.

SF = square feet.

The addition of 210 dwelling units and 190,000 square feet of education-related uses under Alternative 1 would constitute a change from existing conditions within the PHSB district, but would be generally consistent with the PTMP. The addition of 210 dwelling units, most of them small studios or one-bedrooms, would provide for a residential population of about 550 people. Space used for education-related uses would generate an estimated 140 employees, as well as students and visitors. Housing demand created by this increase in employment would be substantially less than the proposed increase in housing supply.

Within the context of the Presidio as a whole, the number of conventional dwelling units that are currently occupied would increase to about 1,160 or more under this alternative, depending on when units currently being rehabilitated in the Fort Scott district are brought on line. When combined with the current number of dormitory units, the total of 1,220 occupied units would remain well below the total of 1,654 units allowed for in the PTMP and below the number analyzed in the PTMP EIS. For a time, however, conventional units (as opposed to dormitory-style units) would represent a larger percentage of the overall unit count than anticipated in the PTMP EIS. As described in the PTMP, the unit mix within the Presidio will fluctuate over time, and will begin to change dramatically when the planned removal of large, conventional units at Wherry Housing is initiated. The resident population of the Presidio is projected to reach a total of about 3,770.

Within the context of the adjacent City neighborhood, the addition of 210 dwelling units would represent an increase of less than one percent in the Richmond neighborhood.³ In general, residential and educational uses would be compatible with surrounding neighborhood uses, which are principally residential. The scale of the PHSB would remain far greater (taller and bigger) than nearby single-family homes, but this difference in scale would not be accentuated in any way and would not alter the fundamental compatibility of residential use with the residential neighborhood.

Arion Press and Lone Mountain Children's Center, existing tenants, would remain at their current location under Alternative 1, but some interim land uses in the PHSB district would be displaced. Specifically, the waste transfer activity that currently occurs behind the PHSB would be relocated to the former U.S. Army transfer yard (across from Amatory Loop), an area within the Presidio's historic forest. Under Alternative 1, composting activities would remain in the parking lot behind the PHSB until a suitable new location is found, although a portion of the parking lot would be reused for its original function, providing up to 233 parking spaces. Battery Caulfield would remain in use as a Trust maintenance or corporation yard until its transformation into open space (natural area and/or recreation) is separately planned for and funded. NPS maintenance activities at Battery Caulfield would be displaced and consolidated or relocated elsewhere in the south district of the GGNRA.

Residents of the new housing proposed within the PHSB district under Alternative 1 could include up to approximately 70 school-age children. These students would seek enrollment at area schools, including schools operated by the SFUSD. Under mitigation agreed to during the PTMP planning process, the Trust will make all reasonable efforts to collaborate with the SFUSD to locate necessary space for students residing at the Presidio and to continue participation in the federal School Impact Aid Program.

3.1.2.2 Alternative 2: Infill Alternative

The rehabilitation and reuse of buildings within the PHSB district under Alternative 2 would increase activity levels as described in the PTMP EIS. The PHSB and the majority of other buildings on the site

³ According to the Housing Element Final Draft for Public Review (September 2003) by the City and County of San Francisco Planning Department, there are about 36,700 dwelling units in the Richmond district, of which 28 percent are single-family homes and 17 percent are within buildings of 10 or more units.

would be used as residential apartments. Non-residential uses would occupy approximately 30,000 square feet.

The addition of up to 350 dwelling units and 30,000 square feet of non-residential uses would constitute a change from existing conditions within the PHSB district, and would differ from the PTMP in two regards. First, unlike Alternative 1, Alternative 2 would place greater emphasis on residential use than on educational use. Second, as a result of the increased emphasis on residential use, the total number of dwelling units within the district would exceed the maximum of 210 specified on page 45 of the PTMP. As a result, the Trust would be constrained from reaching the maximum stated in one or more other districts of the Presidio, so as to stay below the overall maximum of 1,654.

The addition of up to 350 dwelling units, most of them small studios or one-bedrooms, would provide for a residential population of about 910. Space used for non-residential uses would generate an estimated 25 employees.

Within the context of the Presidio as a whole, the number of conventional dwelling units that are currently occupied would increase to about 1,300 or more under this alternative, depending on when units currently being rehabilitated in the Fort Scott district are brought on line. When combined with the current number of dormitory units, the total of 1,360 occupied units would remain well below the total of 1,654 units allowed for in the PTMP and below the number analyzed in the PTMP EIS. For a time, however, conventional units (as opposed to dormitory-style units) would represent a larger percentage of the overall unit count than anticipated in the PTMP EIS. As described in the PTMP, the unit mix within the Presidio will fluctuate over time, and will begin to change dramatically when the planned removal of conventional units at Wherry Housing is initiated. The resident population of the Presidio is projected to reach a total of about 3,770.

Within the context of the adjacent City neighborhood, the addition of 350 dwelling units would represent an increase of less than one percent in the Richmond neighborhood. In general, residential uses would be compatible with surrounding neighborhood uses, which are principally residential. The scale of the PHSB would remain far greater (taller and bigger) than nearby single-family homes, but this difference in scale would not be accentuated in any way and would not alter the fundamental compatibility of residential use with the residential neighborhood.

Arion Press and Lone Mountain Children's Center, existing tenants, would remain at their current location under Alternative 2, but some interim land uses in the PHSB district would be displaced. Specifically, the waste transfer activity that currently occurs behind the PHSB would be relocated to the former U.S. Army transfer yard (across from Amatory Loop), an area within the Presidio's historic forest. Under Alternative 2, the parking lot behind the PHSB on the upper plateau would not be returned to use as a parking area as in Alternative 1. Composting activities would remain until a suitable new location is found. As in Alternative 1, Battery Caulfield would remain in use as a Trust maintenance or corporation yard until its transformation into open space (natural area and/or recreation) is separately planned for and funded. NPS maintenance activities at Battery Caulfield would be displaced and consolidated or relocated elsewhere in the south district of the GGNRA.

Residents of the new housing proposed within the PHSB district under Alternative 2 could include up to approximately 110 school-age children. These students would seek enrollment at area schools, including schools operated by the SFUSD. Under mitigation agreed to during the PTMP planning process, the Trust will make all reasonable efforts to collaborate with the SFUSD to locate necessary space for students residing at the Presidio and to continue participation in the federal School Impact Aid Program.

3.1.2.3 Alternative 3: No Infill Alternative

The rehabilitation and reuse of buildings within the PHSB district under Alternative 3 would increase activity levels, but not to the same extent as Alternative 1, and not to the extent described in the PTMP EIS. The PHSB would be reduced in size and converted to residential use, together with the majority of other buildings on the site. Non-residential uses would occupy approximately 42,000 square feet.

The addition of up to 230 dwelling units and 42,000 square feet of non-residential uses would constitute a change from existing conditions within the PHSB district, and would differ from the PTMP in two regards. First, unlike Alternative 1, Alternative 3 would place greater emphasis on residential use than on educational use. Second, as a result of the increased emphasis on residential use, the total number of dwelling units within the PHSB district would exceed the maximum of 210 specified on page 45 of the PTMP. As a result, the Trust would be constrained from reaching the maximum stated in one or more other districts of the Presidio, so as to stay below the overall maximum of 1,654.

The addition of up to 230 dwelling units, mostly of them small studios or one-bedrooms, would provide for a residential population of up to about 600. Space used for non-residential uses would generate an estimated 20 employees.

Within the context of the Presidio as a whole, the number of conventional dwelling units that are currently occupied would increase to about 1,180 or more under this alternative, depending on when units currently being rehabilitated in the Fort Scott district are brought on line. When combined with the current number of dormitory units, the total of 1,240 occupied units Presidio-wide would remain well below the total of 1,654 units allowed for in the PTMP and below the number analyzed in the PTMP EIS. For a time, however, conventional units (as opposed to dormitory-style units) would represent a larger percentage of the overall unit count than anticipated in the PTMP EIS. As described in the PTMP, the unit mix within the Presidio will fluctuate over time, and will begin to change dramatically when the planned removal of conventional units at Wherry Housing is initiated. The resident population of the Presidio is projected to reach a total of about 3,770.

Within the context of the adjacent City neighborhood, the addition of 230 dwelling units would represent an increase less than one percent in the Richmond neighborhood. In general, residential uses would be compatible with surrounding neighborhood uses, which are principally residential. The scale of the PHSB would remain far greater (taller and bigger) than nearby single-family homes, but this difference in scale would be reduced by the removal of the non-historic wings and would not alter the fundamental compatibility of residential use with the residential neighborhood.

Arion Press and Lone Mountain Children's Center, existing tenants, would remain at their current location under Alternative 3, but some interim land uses in the PHSB district would be displaced. Specifically, the waste transfer activity that currently occurs behind the PHSB would be relocated to the former U.S. Army transfer yard (across from Amatory Loop), an area within the Presidio's historic forest. Under Alternative 3, the parking lot behind the PHSB on the upper plateau would not be returned to use as a parking area as in Alternative 1. Composting activities would remain until a suitable new location is found. As in Alternative 1, Battery Caulfield would remain in use as a Trust maintenance or corporation yard until its transformation into open space (natural area and/or recreation) is separately planned for and funded. NPS maintenance activities at Battery Caulfield would be displaced and consolidated or relocated elsewhere in the south district of the GGNRA.

Residents of the new housing proposed within the PHSB district under Alternative 3 could include up to approximately 75 school-age children. These students would seek enrollment at area schools, including schools operated by the San Francisco Unified School District. Under mitigation agreed to during the PTMP planning process, the Trust will make all reasonable efforts to collaborate with the SFUSD to locate necessary space for students residing at the Presidio and to continue participation in the federal School Impact Aid Program.

3.1.2.4 Alternative 4: Battery Caulfield Alternative

The rehabilitation and reuse of buildings within the PHSB district under Alternative 4 would increase activity levels, but not to the same extent as Alternative 1, and not to the extent described in the PTMP EIS. The PHSB and the majority of other buildings on the site would be used as residential apartments. Non-residential uses would occupy approximately 30,000 square feet.

The addition of up to 269 dwelling units (155 of them for seniors) and 30,000 square feet of non-residential uses would constitute a change from existing conditions within the PHSB district and would differ from the PTMP in two regards. First, unlike Alternative 1, Alternative 4 would place greater emphasis on residential use than on educational use. Second, as a result of the increased emphasis on residential use, the total number of dwelling units within the district would exceed the maximum of 210 specified on page 45 of the PTMP. As a result, the Trust would be constrained from reaching the maximum stated in one or more other districts of the Presidio, so as to stay below the overall maximum of 1,654.

The addition of up to 269 dwelling units, most of them small studios or one-bedrooms and some of them for seniors, would provide for a residential population of about 450. Space used for non-residential uses would generate an estimated 20 employees, in addition to employees required to support the assisted living component of the senior housing.

Within the context of the Presidio as a whole, the number of conventional dwelling units that are currently occupied would increase to about 1,219 or more under this alternative, depending on when units currently being rehabilitated in the Fort Scott district are brought on line. When combined with the current number of dormitory units, the total of 1,279 occupied units would remain well below the total of 1,654 units

allowed for in the PTMP and below the number analyzed in the PTMP EIS. For a time, however, conventional units (as opposed to dormitory-style units) would represent a larger percentage of the overall unit count than anticipated in the PTMP EIS. As described in the PTMP, the unit mix within the Presidio will fluctuate over time, and will begin to change dramatically when the planned removal of conventional units at Wherry Housing is initiated. The resident population of the Presidio is projected to reach a total of about 3,770.

Within the context of the adjacent City neighborhood, the addition of 269 dwelling units would represent an increase of less than one percent in the Richmond neighborhood. In general, residential uses would be compatible with surrounding neighborhood uses, which are principally residential. The scale of the PHSB would remain far greater (taller and bigger) than nearby single-family homes, but this difference in scale would be reduced by removal of the non-historic wings and would not alter the fundamental compatibility of residential use with the residential neighborhood.

Arion Press and Lone Mountain Children's Center, existing tenants, would remain at their current location under Alternative 4, but some interim land uses in the PHSB district would be displaced. Specifically, the waste transfer activity that currently occurs behind the PHSB would be relocated to the former U.S. Army transfer yard (across from Amatory Loop), an area within the Presidio's historic forest. Under Alternative 4, the parking lot behind the PHSB on the upper plateau would not be returned to use as a parking area as in Alternative 1. Composting activities would remain until a suitable new location is found. Unlike in Alternative 1, Battery Caulfield would be converted to residential use, displacing both the Trust maintenance or corporation yard and NPS maintenance functions. Trust activities would be relocated to Battery Dynamite in the Fort Scott district, and NPS maintenance activities would be consolidated or relocated elsewhere in the south district of the GGNRA.

Residents of the new housing proposed within the district under Alternative 4 could include approximately 55 school-age children. These students would seek enrollment at areas schools, including schools operated by the SFUSD. Under mitigation agreed to during the PTMP planning process, the Trust will make all reasonable efforts to collaborate with the SFUSD to locate necessary space for students residing at the Presidio and to continue participation in the federal School Impact Aid Program.

3.1.2.5 Park Presidio Access Variant

The addition of a direct access between the PHSB district and Park Presidio Boulevard would not alter land use, population, housing, employment, or school enrollment associated with any of the alternatives.

3.1.2.6 Cumulative Effects

The cumulative effects of added employment and population in the Presidio are analyzed in the PTMP EIS and would not increase as a result of any of the project alternatives analyzed here. In fact, the shift from a shared emphasis on residential and educational uses in the PTMP EIS analysis and Alternative 1 to a mostly residential use in Alternatives 2, 3, and 4 would tend to reduce cumulative effects, even though the overall number of dwelling units in the PHSB district would be greater than originally analyzed, as would the percentage of units Presidio-wide that are conventional units versus dormitory-style units. This

reduction in effects, as demonstrated within the Transportation analysis (see Section 3.2), is attributable to the high levels of activity generally associated with educational uses.

From a land use and socioeconomic perspective, the reactivation of the PHS district after many years of vacancy would benefit the City's overall housing and employment base whether considered in isolation or in combination with other changes planned for the Presidio or surrounding areas.

3.1.3 MITIGATION MEASURES

The following mitigation measures derived from the PTMP EIS would limit adverse effects related to land use, housing and schools:

CO-2 Jobs/Housing Balance Monitoring – The Trust will monitor housing demand, occupancy, unit mix, and progress toward a jobs/housing balance, and will accommodate Presidio-based employees at a range of income levels. As part of this monitoring effort, the Trust will ensure that the total number of dwelling units Presidio-wide does not exceed the maximum of 1,654.

CO-3 Collaboration with SFUSD – The Trust will make all reasonable efforts to collaborate with the SFUSD to locate necessary space for students residing at the Presidio and to continue participation in the federal School Impact Aid Program.

Preparation and review of this environmental assessment meets requirements of PTMP EIS Mitigation Measure CO-I *Monitoring Area B Uses*, which requires that the Trust review proposed uses for consistency with the PTMP planning principles and consult with the NPS regarding activities with the potential to significantly affect Area A resources. No additional measures have been identified.

3.2 Transportation

Traffic, transit, parking, and other transportation-related issues within the Presidio are described on pages 168 to 183 and 302 to 327 of the PTMP EIS and supplemented below to address issues specific to the PHS project.

3.2.1 AFFECTED ENVIRONMENT

The PHS district is located on the south side of the Presidio, near external roadways including Lake Street, California Street, Park Presidio Boulevard, 14th Avenue, and 15th Avenue. Access through the district is provided by Wedemeyer Street and Battery Caulfield Road. Lake Street is an east-west oriented street located immediately south of the Presidio, with bike lanes and on-street parking on both sides of the street in the vicinity of the project site. California Street is an east-west oriented street located immediately south of Lake Street with one travel lane each way and on-street parking on both sides of the street.

Park Presidio Boulevard (Highway 1) is a major north-south arterial and a state-designated facility under Caltrans jurisdiction. It has three travel lanes each way with a raised median south of its intersection with Lake Street. Approximately 450 feet north of Lake Street, Park Presidio Boulevard narrows to two travel lanes each way south of the MacArthur Tunnel. Fourteenth Avenue is a north-south oriented residential street with on-street parking on both sides of the street that narrows to a width of 30 feet north of Lake Street near the former entrance to the Presidio. The 14th Avenue Gate to the Presidio is currently closed to vehicular traffic. Fifteenth Avenue is a north-south oriented street that is approximately 40 feet wide with one travel lane each way near Lake Street and California Street and narrows to approximately 35 feet near the Presidio gate. Fifteenth Avenue has on-street parking on both sides of the street and provides access to the Presidio approximately 260 feet north of Lake Street. Wedemeyer Street and Battery Caulfield Road are Presidio roadways that provide access to the PHS site and connect 14th Avenue with Washington Boulevard north of the site. Wedemeyer Street has one travel lane each way and no on-street parking.

The 15th Avenue Gate is currently the only direct vehicular access to the PHS site from outside the Presidio, and traffic count data indicate that the weekday daily traffic through the 15th Avenue Gate has increased from about 920 vehicles in November 1998 to about 1,960 vehicles in October 2002, largely due to the occupancy of more buildings in the PHS site.

3.2.1.1 Existing Traffic Conditions at Nearby Intersections

Existing intersection operating conditions were evaluated for weekday AM and PM peak period conditions at six key intersections in the vicinity of the project site. These intersections would most likely experience the greatest change in traffic volumes due to changes in land uses at the project site. The six study intersections, which are shown in Figure 9, are as follows:

- Lake Street/15th Avenue
- Lake Street/14th Avenue
- Lake Street/Park Presidio Boulevard
- California Street/15th Avenue
- California Street/14th Avenue
- California Street/Park Presidio Boulevard

The turning movement traffic volumes at the study intersections were counted by Wilbur Smith Associates (WSA) during the morning and afternoon peak commute periods (7:00 to 9:00 AM and 4:00 to 6:00 PM) in November 2000 as part of the data collection efforts undertaken for the PTMP EIS. After recent review of these data for consistency with traffic volume data from other sources (including the preliminary data from the Doyle Drive study), it was determined that new traffic counts at the Lake/Park Presidio Boulevard and California/Park Presidio

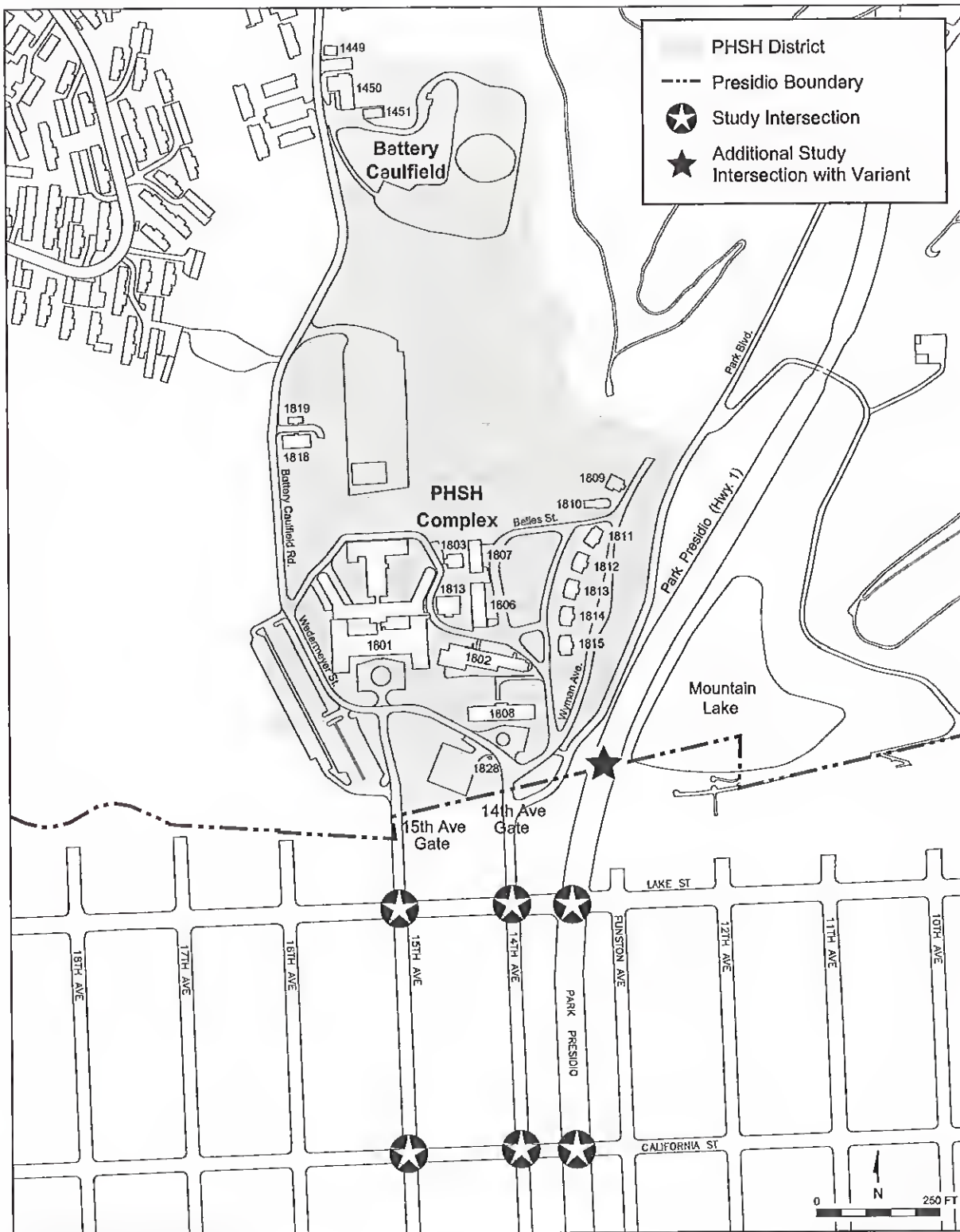


FIGURE 9. STUDY INTERSECTIONS

Source: Presidio Trust, 2003

Boulevard intersections were warranted. Both AM and PM peak turning movement traffic counts were gathered at these two intersections again in January 2004 for the purposes of this analysis. For each study intersection, the peak hour total for the intersection traffic volume during each two-hour period was determined and used for the intersection capacity analysis. In order to conservatively account for the seasonal variation in traffic volumes counts, the intersection turning movement volumes gathered in the winter were adjusted upward by 11 to 15 percent.

The AM and PM peak hour intersection operations analysis was conducted according to the methodology described in the 2000 Highway Capacity Manual (HCM 2000) (Transportation Research Board 2000).⁴ The HCM methodology calculates the average delay experienced by a vehicle traveling through the intersection, and assigns a corresponding level of service (LOS), which ranges from LOS A, indicating volumes well below capacity with vehicles experiencing little or no delay, to LOS F, indicating volumes near capacity with vehicles experiencing extremely high delays. An intersection operating at LOS D or better is generally considered to be operating acceptably. Levels of service E and F are generally considered unacceptable at signalized and all-way stop-controlled intersections.

For signalized intersections, the HCM 2000 methodology determines the average delay per vehicle for each lane group based on the particular movement, and traffic volume and capacity associated with that lane group. The average delay per vehicle is then aggregated for each approach and for the intersection as a whole. A combined weighted average delay and LOS are then presented for the intersection as a whole. For unsignalized intersections, average delay and LOS operating conditions are calculated by approach (e.g., northbound) and movement (e.g., northbound left-turn). For two-way stop-controlled intersections, delay and LOS are calculated for each of the two stop-controlled approaches, and operating conditions are reported for the worst approach. For all-way stop-controlled intersections, average delay per vehicle is averaged across all approaches, and operating conditions are reported for the average delay and LOS for the intersection as a whole.

Table 5 presents the results of the intersection LOS analysis for the existing weekday AM and PM peak hour conditions.⁵ As the table indicates, all six intersections operate at LOS D or better during the weekday AM peak hour. During the weekday PM peak hour, four intersections operate at LOS D or better, with the California Street/14th Avenue and Lake Street/14th Avenue intersections currently operating at LOS E.

3.2.1.2 Existing Traffic Volumes and Safety Considerations

The 15th Avenue Gate entrance is currently the only direct vehicular access to the PHS site from outside the Presidio. As part of the Presidio Bus Management Plan study (Robert Peccia & Associates 1999a), 24-hour machine traffic counts were conducted at the nine Presidio gates during the second week of May, the first week of August, and the third week of November in 1998. The data indicate that approximately

⁴ It should be noted that the results for establishing the operating conditions shown in the PTMP differ slightly from those shown in this analysis because the transportation analyses conducted as part of the PTMP EIS were based on the 1994 HCM methodology, the accepted methodology at that time.

⁵ Detailed calculations of the intersection LOS analysis are provided in technical memoranda for this study.

780 to 920 vehicles per day entered the Presidio via the 15th Avenue Gate, which represented approximately one percent of all vehicles entering or exiting the park on a weekday.

Traffic volumes through the 15th Avenue Gate have increased as occupancy of buildings in the PHS district has increased. Additional count data were collected on a weekday in October 2002, when buildings in the eastern part of the PHS district were occupied by the Jewish Community Center, Arion Press, and Lone Mountain Preschool. The average daily traffic volume was 1,958 vehicles and the PM peak hour traffic volume was 187 vehicles.

Table 5. Intersection Levels of Service – Weekday AM and PM Peak Hours
Existing Conditions

INTERSECTION	TRAFFIC CONTROL DEVICE	AM PEAK HOUR		PM PEAK HOUR	
		DELAY ^a	LOS	DELAY ^a	LOS
Lake St/15 th Ave	4-Way Stop	17.4	C	12.4	B
Lake St/14 th Ave ^b	2-Way Stop	29.3	D	36.1	E
Lake St/Park Presidio Blvd	Traffic Signal	24.4	C	21.5	C
California St/15 th Ave ^b	2-Way Stop	27.0	D	26.6	D
California St/14 th Ave ^b	2-Way Stop	29.6	D	41.9	E
California St/Park Presidio Blvd	Traffic Signal	30.5	C	38.9	D

Source: Wilbur Smith Associates 2004a.

Notes:

^a Delay presented in seconds per vehicle based on the 2000 HCM methodology.

^b LOS and delay shown for worst minor stop-controlled approach. Major approach is uncontrolled and without delay.

Residents of the neighborhood immediately south of the site have general safety concerns related to traffic flow in and through the area, such as the heavy-volume of U-turns at the intersection of Lake Street/14th Avenue and pedestrian crossings across Park Presidio Boulevard at the intersection with Lake Street. Accident data obtained from the San Francisco Department of Parking and Traffic indicate that there have been 13 accidents at the intersection of Park Presidio Boulevard and Lake Street in the past five years, two of which involved pedestrians. There was also an accident at this location in 1996 that resulted in a bicyclist fatality. With respect to the development of the project site, neighborhood residents have expressed safety concerns related to the volume of traffic traveling through the 15th Avenue Gate as well as the speed of traffic exiting the gate.

3.2.1.3 Projected Future Traffic Conditions

As regional population and employment continue to grow as projected, traffic on roadways near the project site is expected to increase over current levels. The increased occupancy of the PHSB district described in the PTMP would contribute to this overall increase in traffic volumes on nearby roadways. The PTMP calls for traffic traveling to and from the district to be accommodated by a one-way couplet at the 14th and 15th Avenue Gates, with the 14th Avenue Gate accommodating inbound traffic and the 15th Avenue Gate accommodating outbound traffic.

3.2.1.4 Transit Service

Major public transit systems serving the project site include the San Francisco Municipal Railway (MUNI) and the Golden Gate Transit (GGT) system operated by the Golden Gate Bridge, Highway and Transportation District. These services provide access to other regional carriers such as BART, AC Transit, Caltrain, SamTrans, and the regional ferry system. In addition, the Presidio's internal shuttle bus service (PresidiGo) serves the park and connects to MUNI and GGT buses at key transfer points.

Five MUNI routes provide regular scheduled daily transit service directly to the San Francisco neighborhoods adjacent to the project site: 1-California, 1AX-California "A" Express, 1BX-California "B" Express, 28-19th Avenue, and the 28L-19th Avenue Limited. Figure 10 illustrates the relative location of these routes to the PHSB district. These MUNI routes operate at a frequency of 6 to 15 minutes during peak commute periods.

Recent ridership data are available for each line's maximum load point, defined as the location along the route at which the highest level of ridership typically occurs. In all instances, with the exception of the 1AX-California route, the maximum load point occurs at a substantial distance from the Presidio (at least 1.6 miles from the PHSB district). Table 6 presents the maximum load points and associated current ridership for the various MUNI bus lines serving the Presidio or its adjacent neighborhoods during the AM and PM peak commute periods. Table 6 indicates that the MUNI lines serving the PHSB district are well-used, but still have available capacity.

Golden Gate Transit (GGT) operates bus lines and ferry routes between San Francisco and Marin and Sonoma Counties. Twenty-one GGT bus lines pass through the Presidio during the AM and PM peak hours, all stopping at the Golden Gate Bridge Plaza. Only Route 10, however, proceeds south into San Francisco via Highway 1, Park Presidio Boulevard, and Geary Boulevard, with the stop nearest to the project site located at the Park Presidio/California intersection.

Early in 2002, the Trust began an internal, free-of-charge shuttle service for the Presidio (PresidiGo) that runs on compressed natural gas. The shuttle's two routes (orange and blue) serve the entire Presidio with more than 40 stops within the park, including key transfer points to MUNI and GGT buses. The service currently operates on 30-minute headways from 7:00 AM to 7:00 PM on weekdays, and on one-hour headways from 11:00 AM to 6:00 PM on weekends.

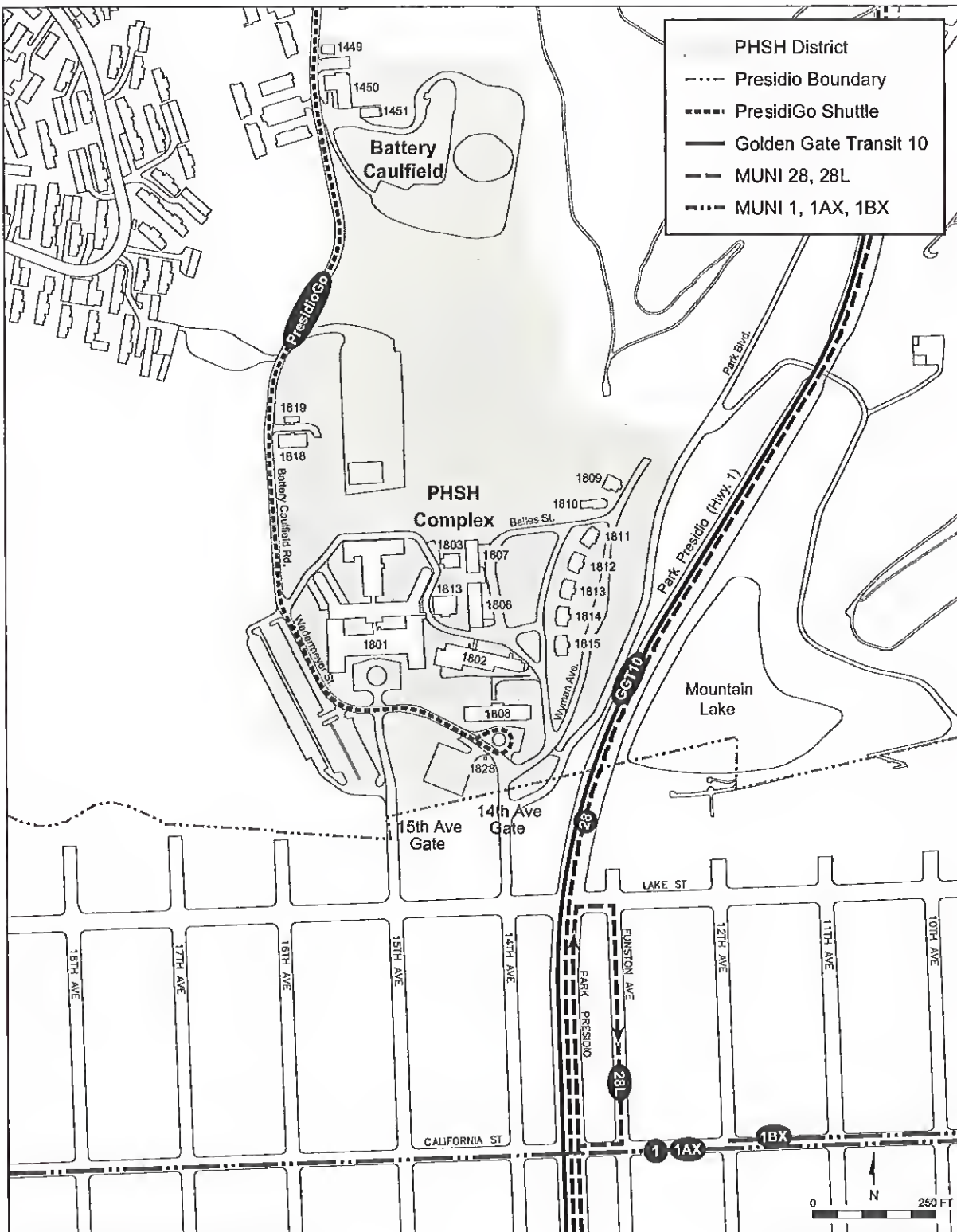


FIGURE 10. EXISTING TRANSIT ROUTES

Source: Presidio Trust, 2003

Table 6. Existing MUNI Passenger Loads

LINE	DIRECTION	AM PEAK HOUR				PM PEAK HOUR			
		MAXIMUM LOAD POINT	PEAK HOUR LOAD	PEAK HOUR CAPACITY	LOAD FACTOR	MAXIMUM LOAD POINT	PEAK HOUR LOAD	PEAK HOUR CAPACITY	LOAD FACTOR
1	to Howard/Main	Clay/Powell	929	987	94%	Clay/Polk	650	1,377	47%
	to Geary/33 rd	Sacramento/Polk	444	851	52%	Sacramento/Powell	1,243	1,533	81%
1AX	to Davis/Pine	California/Park Presidio	303	432	70%	n.a.	n.a.	n.a.	n.a.
	to Geary/33 rd	n.a.	n.a.	n.a.	n.a.	California/Park Presidio	154	314	49%
1BX	to Davis/Pine	California/Fillmore	653	765	85%	n.a.	n.a.	n.a.	n.a.
	to Park Presidio/California	n.a.	n.a.	n.a.	n.a.	California/Fillmore	248	373	66%
28	to Fort Mason	19 th Ave/Lincoln	311	588	53%	19 th Ave/Sloat	302	425	71%
	to Daly City BART	19 th Ave/Sloat	171	425	40%	19 th Ave/Lincoln	374	410	91%
28L	to Park Presidio/California	19 th Ave/Lincoln	134	273	49%	n.a.	n.a.	n.a.	n.a.
	to Daly City BART	19 th Ave/Sloat	113	331	34%	n.a.	n.a.	n.a.	n.a.

Source: MUNI, FY 2001-2002 Transit Data.

Notes:

^a n.a. = not applicable; indicates that no runs are made on that route in that direction during that particular time period.^b Peak hour capacity is based on the MUNI Bus and Metro FY 2001-2002 Weekday Conditions. It assumes an appreciable number of standees per vehicle (somewhere between 60 percent and 80 percent of the number of seated passengers, depending on the specific transit vehicle configuration) and may not include the effects of missed or late runs.^c Peak hour ridership is assumed to be 60 percent of the two-hour peak period ridership.^d The 1-California line operates at a three-minute headway east of Fillmore Street; the peak hour loads correspond to maximum load points that occur in this zone.

The blue PresidiGo line serves the project site with a stop at Wedemeyer Street, in front of Building 1808 (Nurses' Quarters) and the 14th Avenue Gate. It connects with the following bus lines: MUNI's 29-Sunset at Lincoln Boulevard, GGT's Transbay lines at the Golden Gate Bridge Plaza, MUNI's 82X-Presidio and Wharves Express at the Transit Center near the Main Post, and MUNI's 43-Masonic on Letterman Drive. During the first nine months of 2003, the PresidiGo service carried an average of 5,620 passengers each month, or an average of about 190 passengers per day. In addition, PresidiGo provides special service for tenants and events within the Presidio. Special service must be arranged in advance and is generally paid for by the tenant or event sponsor.

3.2.1.5 Bicycle and Pedestrian Conditions

Figure 11 illustrates the existing and proposed trails and bikeways in the vicinity of the project site. Paved sidewalks connect the main buildings within the PHS district by extending, for example, along the north side of Wedemeyer Street in front of Buildings 1801 (the former hospital building) and 1808 (the former nurses' quarters). Pedestrian paths on both sides of 15th Avenue and on the east side of 14th Avenue connect the site to the nearby park entrances. A similar network of pedestrian paths links together the buildings on Wyman Avenue. A shared pedestrian-bicycle path also crosses under Highway 1 to connect the project site to the Mountain Lake area. Implementation of the approved Bikeways and Trails Master Plan will extend this multi-use path around the south side of the project site to Battery Caulfield Road on the west side of the site. The Master Plan will also provide a continuous pedestrian path in the Wedemeyer Street/Battery Caulfield corridor and add pedestrian paths that connect the project site to Lobos Creek and Baker Beach Apartments.

Sixty-seven pedestrians were counted at Battery Caulfield Road from 7:00 AM to 6:00 PM during a weekday in October 1999; 157 pedestrians were counted the following Saturday during the same time period (Robert Peceia & Associates 1999b).

There are several bicycle routes through the Presidio, although bicycles and vehicles currently share a standard-width roadway along most of these routes. Near the project site, 15th Avenue, 25th Avenue, and El Camino del Mar are part of the designated San Francisco Citywide Bicycle Routes (Routes 69, 75, and 95, respectively) that continue into the Presidio. Route 69 is a Class III facility (signed route only where bicyclists share roadway with vehicles, generally with wider travel lanes). In the immediate vicinity of the project site, Route 69 follows Wedemeyer Street and Battery Caulfield Road to connect with Route 65 (Class III) at Washington Boulevard. The Presidio Bikeways and Trails Master Plan allows for an uphill bike lane on Wedemeyer Street/Battery Caulfield Road between 15th Avenue and Washington Boulevard. Park Boulevard/West Pacific Avenue at the southeast corner of the site is a Class I facility (paved off-street path separated from motor vehicle traffic) that extends from 14th Avenue and crosses under Highway 1 to connect to the Presidio Golf Course parking area on West Pacific Avenue. This facility will be extended around the south side of the PHS site to Battery Caulfield Road on the west side of the site as part of implementation of the Bikeways and Trails Master Plan.

Forty-five bicyclists were counted at Battery Caulfield Road from 7:00 AM to 6:00 PM during a weekday in October 1999; 241 bicyclists were counted the following Saturday during the same time period.

3.2.1.6 Parking Conditions

On-street parking in the San Francisco neighborhood near the project site entrance is not metered, but is mostly restricted to a two-hour time limit, except for local residents displaying the appropriate sticker. Near the project site, the “N” residential permit parking zone, in which an “N” sticker is required in order to legally exceed the two-hour parking limit, extends on both sides of 14th and 15th Avenues between California Street and the Presidio, on both sides of Lake Street between 14th and 15th Avenues, and on both sides of 15th Avenue and on the west side of 14th Avenue between California Street and Clement Street. The only other parking restriction in this area is for weekly street cleaning.

As part of a study to assess the potential “spillover” effects of daytime parking fees and time restrictions in the Presidio, parking supply and occupancy surveys were conducted in the early morning, midday, and late afternoon periods of weekdays in October 2001 and December 2000. Survey data indicate that there are approximately 260 on-street parking spaces on Lake and California Streets between 14th and 18th Avenues and on 14th and 15th Avenues between California Street and the Presidio. Parking occupancy data indicate that 87 percent of the parking spaces are occupied early in the morning (6:00-8:30 AM) as residents start leaving the area to go to work. About 60 percent are occupied during the middle of the day (11:00 AM-1:00 PM), and about 47 percent are occupied in the late afternoon (3:00-5:00 PM). The cluster of parked vehicles near the 15th Avenue Gate suggests that the Presidio is used by some residents in the surrounding neighborhood as a convenient parking area when sufficient on-street parking is not available, and that parking occupancy during late evenings and weekends likely nears 100 percent.

Parking is currently prohibited on the Battery Caulfield site, and there are approximately 30 parking spaces in the paved areas around Buildings 1818, 1819, and 1450. There are 306 parking spaces on the lower plateau. Because there are a number of vacant buildings within the PHSB complex, most of these spaces are unoccupied.

3.2.2 ENVIRONMENTAL CONSEQUENCES

Impacts related to transportation and circulation are discussed on pages 302 to 327 of the PTMP EIS, which identify a number of intersections where operations will degrade to unacceptable levels of service by the year 2020, including some for which no mitigation is available. The PTMP EIS analysis is incorporated here by reference, together with results of two subsequent transportation studies: Access Study at 14th /15th Avenue Gates (Presidio Trust 2003d) and Presidio Public Health Service Hospital Transportation Study: Additional Alternatives Analysis (Wilbur Smith Associates 2003). Relevant sections of these studies are summarized below and expanded upon as necessary. Analysis of transportation-related impacts for the four PHSB alternatives is further detailed in three technical memoranda prepared for this study (Wilbur Smith Associates 2004a-c).

3.2.2.1 Travel Demand

Trip generation rates, mode split, auto occupancy factors, and other travel and parking demand parameters were used to estimate the number of weekday daily, AM, and PM peak hour trips that would be generated by each of the four proposed alternatives.

The methodology is based on that used in the cumulative analysis for the PTMP EIS, which, in turn, was based on trip generation information from standard data sources such as the San Francisco Planning Department Guidelines for Environmental Review (SF Guidelines), the State of California Department of Transportation (Caltrans), and the Institute of Transportation Engineers (ITE). Modal split and auto occupancy for each of the alternatives vary by land use type and differ between external trips and trips internal to the Presidio. All of these travel characteristics incorporate the transportation demand management (TDM) measures included in the PTMP. Parking demand has also been estimated for midday weekday, evening, and weekend conditions, based on the methodology used in the PTMP EIS.

In order to estimate the number of person trips that would be generated by each alternative, trip generation rates were developed for and applied to the different land use types (residential, senior residential, cultural/educational, recreation, office, etc.). A trip generation rate expresses the number of person trips that would be generated by a unit (dwelling unit or square foot) of given land use type. Person trips for each alternative were calculated for weekday daily, AM peak hour, and PM peak hour conditions. In order to accurately reflect the different travel behavior characteristics of different types of housing, different trip generation rates were used for senior housing and conventional housing.

Trip generation rates by land use type were estimated based on information from the San Francisco Guidelines for Environmental Review, the Institute of Transportation Engineers Trip Generation Manual-Sixth Edition, the Caltrans' 15th Progress Report on Trip Ends Generation Research Counts, and the San Diego Traffic Generators Manual. Based on these sources, the person trip generation rates shown in Table 7 were developed to reflect the land uses described for each alternative.

Based on the Trust's live/work model, it is expected that many of the employed residents living in the Presidio would work within the park. The expected balance of employment and residential land uses within the Presidio by 2020 creates the opportunity for Presidio residents to work within the Presidio; therefore some of the trips would both originate and terminate in the Presidio. In order to evaluate internal trips differently from trips to and from other parts of the City or Bay Area, and to accurately reflect the effect of the jobs/housing balance on travel behavior, the number of person trips generated by the proposed land uses in each alternative was separated into external and internal trips. Approximately 5 to 14 percent (depending on the alternative) of the trips generated or attracted to the project site were assumed to begin and end within the Presidio. Presidio residents working in the Presidio could walk, bike, or ride the internal shuttle service to destinations within the Presidio. Because internal trips are more likely to be made by transit, walking, or bicycling than external trips, the separation of the two types of trips allowed for the application of different mode splits.

Table 7. Trip Generation Rates by Land Use

TIME PERIOD	LAND USE TYPE						
	INDUSTRIAL/ WAREHOUSE ¹	OFFICE ^a	CONFERENCE ^a	RECREATION ^a	CULTURAL/ EDUCATIONAL ^a	RESIDENTIAL ^b	SENIOR RESIDENTIAL ^b
Daily	6	15	8.5	45	67	10	5
<i>Inbound</i>	50%	50%	50%	50%	50%	50%	50%
<i>Outbound</i>	50%	50%	50%	50%	50%	50%	50%
AM Peak Hour	0.60	2.25	0.85	2.48	10.7	0.90	0.20
<i>Inbound</i>	80%	90%	80%	60%	53%	20%	20%
<i>Outbound</i>	20%	10%	20%	40%	47%	80%	80%
PM Peak Hour	0.90	1.50	0.85	4.50	12.1	1.05	0.25
<i>Inbound</i>	20%	15%	30%	50%	47%	70%	70%
<i>Outbound</i>	80%	85%	70%	50%	53%	30%	30%

Source: Wilbur Smith Associates 2003.

Notes:

^a Number of person trips per 1,000 gross square feet.

^b Number of person trips per dwelling unit.

Project site-generated person trips were assigned to travel modes in order to estimate the number of auto, transit, and walk/bicycle trips. Mode split information was obtained from the PTMP EIS. This information was based on Presidio employee and resident surveys and the minimum performance standards of the Transportation Demand Management Program as outlined in Appendix D of the PTMP.

Auto person trips refer to person trips involving either a driver or a passenger in a private vehicle. To determine the number of vehicle trips generated by the number of auto person trips, average vehicle occupancy was used. The assumed vehicle occupancy factor varies by land use. The chosen vehicle occupancy factors were based on the PTMP EIS, which in turn are based on Citywide Travel Behavior Survey (CTBS) travel data published by the San Francisco Planning Department.

Table 8 presents the projected daily, AM peak hour, and PM peak hour travel demand estimates by mode for typical weekday conditions for the four project alternatives analyzed. Daily and peak hour travel demand vary by alternative, depending on the land uses included in each alternative and the intensity of use. Detailed travel demand calculations by alternative are provided in technical memoranda for the transportation analysis for this project.

Table 8. Estimated Trip Generation^a by Mode of Travel and by Alternative
Weekday Daily, AM and PM Peak Hour

TIME PERIOD	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Daily				
Person Trips^b				
Auto	5,354	2,816	2,048	1,759
Transit	1,557	701	496	427
Other ^c	1,604	658	460	410
Total	8,515	4,175	3,004	2,596
<i>Vehicle Trips^d</i>	<i>3,728</i>	<i>2,212</i>	<i>1,600</i>	<i>1,346</i>
AM Peak Hour				
Person Trips^b				
Auto	313	298	222	171
Transit	92	69	50	36
Other ^c	95	63	45	32
Total	500	430	317	239
<i>Vehicle Trips^d</i>	<i>225</i>	<i>229</i>	<i>170</i>	<i>127</i>
PM Peak Hour				
Person Trips^b				
Auto	707	343	260	203
Transit	206	80	59	44
Other ^c	213	73	53	40
Total	1,126	496	372	287
<i>Vehicle Trips^d</i>	<i>494</i>	<i>265</i>	<i>199</i>	<i>151</i>

Source: Wilbur Smith Associates 2003.

Notes:

^a Includes inbound and outbound trips.

^b Person trips refer to trips made by all modes.

^c "Other" includes walking, bicycling, and other modes.

^d Vehicle trips are calculated by dividing the auto person trips by the average number of persons per vehicle.

The modal split for the PTMP or no action alternative (Alternative 1) would be approximately 63 percent by auto, 18 percent by transit use, and 19 percent by walking and bicycle. For the other three alternatives, the modal split would be approximately 67 to 72 percent by auto, 15 to 17 percent by transit use, and 13 to 16 percent by walking and bicycle. The average number of occupants per vehicle would be 1.3 to 1.4 for all alternatives. The number of weekday daily person trips would range from about 2,600 for Alternative 4 to approximately 8,500 for Alternative 1; vehicle trips would follow a similar pattern. In general, approximately 6 to 11 percent of the daily trips generated by each alternative would occur during the AM peak hour, and 11 to 13 percent would occur during the PM peak hour.

The geographic distribution of employee, visitor, and resident trips to the project site was based on data gathered as part of the PTMP EIS transportation analysis, which in turn was based on a survey of Presidio employees, the San Francisco Guidelines for Environmental Review, and results from the San Francisco County Transportation Authority travel demand model. The PHS-generated and -attracted trips were distributed to San Francisco, the East Bay, the North Bay, and the South Bay. The trips to and from San Francisco were further separated into four quadrants of the City, or Superdistricts as described in the Citywide Travel Behavior Survey. Based on the trip distribution, external vehicle trips were assigned to the local street network, and external transit trips were assigned to the appropriate transit routes.

3.2.2.2 Traffic at Local Intersections

Currently, the 15th Avenue Gate is open to vehicular (and pedestrian) traffic and the 14th Avenue Gate is open only to pedestrians. Although this configuration functions adequately with the existing level of traffic, future occupancy of the PHS and other Presidio buildings is expected to warrant improved access and circulation. The NPS 1994 General Management Plan Amendment for the Presidio recognized such access needs and recommended reopening the 14th Avenue Gate to vehicular traffic and operating the 14th Avenue and 15th Avenue Gates as a one-way couplet with the 14th Avenue Gate accommodating northbound traffic entering the Presidio and the 15th Avenue Gate accommodating southbound traffic exiting the Presidio. This one-way couplet was assumed in the analysis of transportation-related impacts of land use alternatives in the PTMP EIS and was also assumed for the assessment of traffic impacts related to the four PHS alternatives. Alternatives 2, 3, and 4 were also analyzed assuming the Park Presidio Boulevard Access Variant, which would provide a new intersection on Park Presidio Boulevard and with which both the 14th and 15th Avenue Gates would be open to inbound (northbound) traffic only.

All of the action alternatives would generate less traffic than Alternative 1 in the peak hours, and consequently the effects on nearby roadways and intersections, including effects on Highway 1 and U.S. 101, would be less than anticipated with Alternative 1. With the Park Presidio Boulevard Access Variant, Alternatives 2, 3, and 4 would result in slightly more traffic on Highway 1 north of the new intersection than with the roadway network configuration assumed in the PTMP. Compared to Alternative 1, Alternatives 2, 3, and 4 with the Park Presidio Boulevard Access Variant would result in less than one percent more total traffic on Highway 1 just north of the project site.

Tables 9 and 10 compare the projected average delay per vehicle and associated intersection level of service under the various alternatives with and without the Park Presidio Access Variant in the AM peak hour and PM peak hour, respectively. With the Park Presidio Access Variant, signal timings for other intersections on Park Presidio Boulevard could possibly be modified to optimize individual intersection operation and progression of traffic on Park Presidio Boulevard. The analysis described below assumes slight modifications to the signal timings at the intersections of Lake Street/Park Presidio Boulevard and California Street/Park Presidio Boulevard. However, these modifications would not compromise the ability of pedestrians to safely cross Park Presidio Boulevard.

Alternative 1: PTMP or No Action Alternative – Under Alternative 1, in the AM peak hour, all but two intersections would operate at LOS D or better. The minor approaches to the two-way stop-controlled intersections of Lake Street/14th Avenue and California Street/14th Avenue would operate at LOS F. In the PM peak hour, the minor approaches to the two-way stop-controlled intersections of Lake Street/14th Avenue, California Street/14th Avenue and California Street/15th Avenue would operate at LOS F.

While the low-volume traffic on one or both of the minor approaches to these intersections would incur delay, the majority of the traffic on the uncontrolled approaches (California Street or Lake Street) would not have to stop and therefore would not incur any delay. The possible mitigation measure identified for Lake Street/14th Avenue in the PTMP EIS included signalization and restriping to provide a westbound left-turn pocket at Lake Street /14th Avenue (Mitigation Measure TR-11). The possible mitigation measure identified in the PTMP EIS for the California Street/14th Avenue intersection included installing STOP signs on California Street at the intersection and restriping to add a right-turn lane to the northbound approach, or possibly installing a traffic signal if queues on the westbound approach were determined to extend into the adjacent intersection of Park Presidio Boulevard/California Street.

While signalization would mitigate the operation of these intersections, it has been determined, through subsequent analysis (Access Study at 14th/15th Avenue Gates, Presidio Trust, February 2003) and coordination with the San Francisco Department of Parking and Traffic following their comments on the PTMP EIS that questioned the need for improving the minor approaches to these intersections (PTMP EIS, Volume II, Chapter 5, page 5-59), that the LOS E or F conditions on the minor approaches to Lake Street/14th Avenue could be mitigated with other measures such as RIGHT TURN ONLY restrictions for the minor approaches. The minor approach(es) to the intersection of Lake Street/14th Avenue are expected to operate with more average delay per vehicle than the minor approach(es) to the intersection of California Street/14th Avenue or California Street/15th Avenue. Therefore, such measures would also likely improve the minor approach(es) to the intersection of California Street/14th Avenue to LOS D or better in the AM and PM peak hours, and to improve the minor approach(es) to the intersection of California Street/15th Avenue to LOS D or better in the PM peak hour.

It should be noted that the intersection of California Street/15th Avenue was not expected to operate at LOS F in the PM peak hour based on the traffic analysis for the Final Plan Alternative in the PTMP EIS. The Highway Capacity Manual (HCM) methodology was revised in 2000; because the revisions were very recent at the time of the PTMP EIS analysis, the HCM 2000 methodology was not widely accepted

Table 9. Intersection Levels of Service – Weekday AM Peak Hour
Year 2020 Conditions

INTERSECTION	CONTROL	ONE-WAY COUPLET AT 14 TH & 15 TH AVE. GATES								VARIANT: NEW PARK PRESIDIO BLVD. ACCESS WITH INBOUND ONLY TRAFFIC AT 14 TH & 15 TH AVE. GATES							
		ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
		DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS
Lake Street/ 15 th Avenue	4-way STOP	27.0	D	29.1	D	27.2	D	26.0	D	21.6	C	21.3	C	21.1	C		
Lake Street/ 14 th Avenue ^b	2-way STOP	86.9	F	68.8	F	62.9	F	59.5	F	45.1	E	43.7	E	42.5	E		
Lake Street/ Park Presidio Boulevard	Signal	37.9	D	38.1	D	37.9	D	37.9	D	39.6	D	39.1	D	38.6	D		
California Street/ 15 th Avenue ^b	2-way STOP	28.4	D	27.7	D	27.4	D	27.5	D	32.1	D	31.9	D	31.7	D		
California Street/ 14 th Avenue ^b	2-way STOP	58.8	F	53.0	F	51.7	F	50.8	F	61.1	F	58.2	F	55.5	F		
California Street/ Park Presidio Boulevard	Signal	42.3	D	42.3	D	42.3	D	42.3	D	42.3	D	42.3	D	42.3	D		
New Alternative Access/ Park Presidio Boulevard	Signal	--	--	--	--	--	--	--	--	5.6	A	4.9	A	4.8	A		

Source: Wilbur Smith Associates 2004c.

^a Delay presented in seconds per vehicle based on the HCM 2000 methodology.

^b See footnote 5.

Table 10. Intersection Levels of Service – Weekday PM Peak Hour
Year 2020 Conditions

INTERSECTION	CONTROL	ONE-WAY COUPLET AT 14 TH & 15 TH AVE. GATES								VARIANT: NEW PARK PRESIDIO BLVD. ACCESS WITH INBOUND ONLY TRAFFIC AT 14 TH & 15 TH AVE. GATES							
		ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4			
		DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS	DELAY ^a	LOS
Lake Street/ 15 th Avenue	4-way STOP	22.1	C	19.2	C	18.8	C	18.3	C	17.4	C	17.1	C	16.9	C		
Lake Street/ 14 th Avenue ^b	2-way STOP	>90	F	>90	F	>90	F	>90	F	>90	F	>90	F	>90	F		
Lake Street/ Park Presidio Boulevard	Signal	36.4	D	36.3	D	36.2	D	36.2	D	50.0	D	48.7	D	48.2	D		
California Street/ 15 th Avenue ^b	2-way STOP	55.6	F	47.4	E	45.5	E	44.3	E	42.7	E	41.0	E	39.7	E		
California Street/ 14 th Avenue ^b	2-way STOP	>90	F	>90	F	>90	F	>90	F	>90	F	>90	F	>90	F		
California Street/ Park Presidio Boulevard	Signal	75.4	E	75.4	E	75.4	E	75.4	E	72.0	E	71.6	E	71.3	E		
New Alternative Access/ Park Presidio Boulevard	Signal	--	--	--	--	--	--	--	--	7.0	A	6.9	A	6.8	A		

Source: Wilbur Smith Associates 2004c.

^a Delay presented in seconds per vehicle based on the HCM 2000 methodology.

^b See footnote 5.

at the time. The PTMP EIS therefore used an older (1994) HCM methodology. The HCM 2000 methodology has since become widely accepted, and using this methodology the intersection of California Street/15th Avenue is forecasted to operate at LOS F in the PM peak hour, while it was forecasted to operate at LOS D in the PTMP EIS. The California Street/15th Avenue intersection is a two-way stop-controlled intersection like California Street/14th Avenue and Lake Street/14th Avenue, and the Trust would work with the San Francisco Department of Parking and Traffic to develop acceptable improvements if desired. It is likely that alternatives to signalization, such as turn restrictions on the minor approach(es) similar to Lake Street/14th Avenue, would improve the operation on the minor approaches to this intersection.⁶

The signalized intersection of California Street/Park Presidio Boulevard would operate at LOS E in the PM peak hour. This intersection is expected to operate at LOS E due to the growth in traffic volumes associated with Bay Area regional trends in population and employment. The PTMP EIS determined that this intersection would be unmitigable, and the Presidio's contribution to the total peak hour traffic volume is expected to be less than two percent.

Alternative 2: Infill Alternative – Alternative 2 would generate 2,212 daily vehicle trips, or 41 percent fewer than Alternative 1, due to its emphasis on residential rather than combined residential and educational uses. In the AM peak hour, Alternative 2 would generate slightly more vehicle trips than Alternative 1, but in the PM peak hour would generate about 46 percent fewer vehicle trips than Alternative 1.

As shown in Table 9, in the AM peak hour in 2020, Alternative 2 would yield the same intersection levels of service as Alternative 1 (the PTMP or no action alternative), but would result in the same or less average delay per vehicle at all intersections except Lake Street/15th Avenue and Lake Street/Park Presidio Boulevard. With the variant that assumes direct access to the project site from Park Presidio Boulevard, the LOS F conditions at the minor approach to the two-way stop-controlled intersection of Lake Street/14th Avenue would improve to LOS E under Alternative 2, the LOS D conditions at the all-way stop-controlled intersection of Lake Street/15th Avenue would improve to LOS C, and all other intersections would operate at the same levels of service as with Alternative 1.

In the PM peak hour in 2020, Alternative 2 would operate at the same levels of service as Alternative 1, except at the intersection of California Street/15th Avenue, which would improve to LOS E. As with Alternative 1, one or both of the minor approaches to the three two-way stop-controlled intersections of Lake Street/14th Avenue, California Street/14th Avenue and California Street/15th Avenue are expected to operate at LOS E or F. The signalized intersections of Lake Street/Park Presidio Boulevard and California Street/Park Presidio Boulevard would operate at LOS D and E, respectively, as they would

⁶ Although mitigation could improve conditions at LOS E or F two-way stop controlled intersections, the Trust does not consider these conditions to be significant environmental effects. At the intersection of California Street/15th Avenue, traffic volumes would be the same as analyzed/reported in the PTMP EIS, and at all two-way stop-controlled intersections, drivers are presented with choices that necessarily reduce the delay they experience to acceptable levels. For example, when a driver experiences delay at the minor leg of a two-way stop-controlled intersection, the driver always has the option of making a right turn and using a less direct route to a destination. Because of driver choice, the limited delays experienced at the intersection as a whole, on the major approaches, LOS E or F conditions at two-way stops are not considered to be significant environmental effects.

with Alternative 1. The California Street/Park Presidio Boulevard intersection could not be mitigated. The Presidio would contribute less than two percent to the total peak hour volumes at this intersection.

With the variant that assumes direct access to the project site from Park Presidio Boulevard in the PM peak hour, levels of service would be the same as under Alternative 1 except at one intersection. At the two-way stop-controlled intersection of California Street/15th Avenue, the LOS F conditions expected for the minor approach under Alternative 1 would improve to LOS E with Alternative 2.

Alternative 3: No Infill Alternative – Alternative 3 would generate 1,600 daily vehicle trips or 57 percent fewer than Alternative 1 due to its emphasis on residential uses and its smaller size. In the AM peak hour, Alternative 3 would generate 170 vehicle trips or 24 percent fewer than Alternative 1, and in the PM peak hour Alternative 3 is expected to generate 199 vehicle trips or 60 percent fewer trips than Alternative 1.

In the AM peak hour in 2020, Alternative 3 would yield the same intersection levels of service as Alternative 1 but with delays that are about the same or less than with Alternative 1. With the variant that assumes direct access to the project site from Park Presidio Boulevard, the levels of service would be the same as with Alternative 1 except at the intersections of Lake Street/14th Avenue and Lake Street/15th Avenue. The LOS F conditions at the minor approach to the two-way stop-controlled intersection of Lake Street/14th Avenue under Alternative 1 would improve to LOS E under Alternative 3. At the all-way stop-controlled intersection of Lake Street/15th Avenue, the LOS D conditions associated with Alternative 1 would improve to LOS C with Alternative 3. With the Park Presidio Access Variant, Alternative 3 would result in average delays ranging between 50 percent less and 12 percent more than Alternative 1.

In the PM peak hour in 2020, Alternative 3 would yield the same levels of service as Alternative 1 under the one-way couplet scenario except at the intersection of California Street/15th Avenue, which would improve to LOS E. Assuming direct access to Park Presidio Boulevard, levels of service would be the same as with Alternative 1 with the exception of the minor approach(es) of California Street/15th Avenue, which would operate at LOS E compared to LOS F with Alternative 1.

Alternative 4: Battery Canfield Alternative – Alternative 4 would generate the least vehicle trips on a daily basis as well as during the AM and PM peak hours due to its emphasis on residential use and its inclusion of senior housing. Alternative 4 is expected to generate 1,346 daily vehicle trips or 64 percent fewer than Alternative 1. In the AM peak hour, Alternative 4 would generate 127 vehicle trips or 44 percent fewer than Alternative 1, and in the PM peak hour Alternative 4 is expected to generate 151 vehicle trips or 69 percent fewer trips than the number of vehicle trips generated by Alternative 1.

As shown in Table 9, in the AM peak hour in 2020, Alternative 4 would yield the same intersection levels of service as Alternative 1, but would result in the same or less average delay per vehicle at all intersections. The most substantial difference in average delay would occur at the intersection of Lake Street/14th Avenue, where the average delay would be about 31 percent less than with Alternative 1. With the variant that assumes direct access to the project site from Park Presidio Boulevard, levels of service

would be the same as with Alternative 1 except at the intersections of Lake Street/14th Avenue and Lake Street/15th Avenue. The LOS F conditions at the minor approach to the two-way stop-controlled intersection of Lake Street/14th Avenue would improve to LOS E with Alternative 3, and the LOS E conditions at the intersection of Lake Street/15th Avenue would improve to LOS C with Alternative 3.

In the PM peak hour in 2020, Alternative 4 would operate at the same levels of service as Alternative 1 except at the intersection of California Street/15th Avenue, which would improve from LOS F with Alternative 1 to LOS E. The average delay per vehicle would be the same or less than with Alternative 1 at all intersections. As with Alternative 1, the signalized intersection of California Street/Park Presidio Boulevard would operate at LOS E. This signalized intersection could not be mitigated. The Presidio would contribute less than two percent to the total peak hour volumes at this intersection. With the variant that assumes direct access to the project site from Park Presidio Boulevard, all intersections would operate at the same levels of service as with Alternative 1 except the intersection of California Street/15th Avenue which would improve from LOS F to LOS E.

3.2.2.3 Traffic Operations and Safety Considerations

Traffic conditions on Park Presidio Boulevard and in the surrounding residential neighborhood would vary across alternatives and with the Park Presidio Access Variant. Table 11 shows anticipated peak hour traffic volumes through the 14th and 15th Avenue Gates for each of the alternatives with and without the variant. Future traffic volumes through the 14th and 15th Avenue Gates would relate directly to the level of comfort and safety concerns of the residents of the surrounding neighborhood.

Table 11. Comparison of Peak Hour Traffic Volumes^a through 14th/15th Avenue Gates

ALTERNATIVE	AM PEAK HOUR	PM PEAK HOUR
Alternative 1	300	560
Alternative 2	310	480
Alternative 3	290	450
Alternative 4	270	430
Alternative 2 with Variant	150	270
Alternative 3 with Variant	150	250
Alternative 4 with Variant	140	240

Source: Wilbur Smith Associates 2004c.

^a Forecasted 2020 gate volumes have been rounded.

Alternative 1: PTMP or No Action Alternative – Alternative 1 is expected to result in approximately 300 and 560 vehicles per hour traveling through the 14th and 15th Avenue Gates in the AM and PM peak

hours, respectively. A PM peak hour volume of 560 vehicles is about three times the PM peak hour volume of 187 vehicles per hour observed in October 2002.

Alternative 2: Infill Alternative – Alternative 2 would result in 14 percent fewer PM peak hour vehicle trips through the 14th and 15th Avenue Gates than Alternative 1. During the AM peak hour, Alternative 2 would generate about three percent more vehicle trips through the gates due to its emphasis on residential uses rather than residential and educational uses. The reduction in traffic volume through the 14th and 15th Avenue Gates would result in less traffic on nearby residential neighborhood streets, and therefore could result in a higher level of comfort, quality of life benefits, and safer conditions for neighborhood residents.

With the Park Presidio Access Variant, Alternative 2 would result in about half the volume of traffic through the 14th and 15th Avenue Gates during both the AM and PM peak hours compared to Alternative 1. In addition, the Park Presidio Access Variant would improve pedestrian and bicycle safety at the intersection of Lake Street/Park Presidio Boulevard because the new intersection on Park Presidio Boulevard would replace the Lake Street intersection as the first intersection encountered by southbound traffic on Highway 1.

Alternative 3: No Infill Alternative – When compared to Alternative 1, Alternative 3 would result in 3 and 20 percent fewer vehicle trips through the 14th and 15th Avenue Gates during the AM and PM peak hours, respectively. With the Park Presidio Access Variant, Alternative 3 would result in 50 and 55 percent less traffic through the 14th and 15th Avenue Gates during the AM and PM peak hours, respectively, than Alternative 1. Less traffic through the 14th and 15th Avenue Gates would result in less traffic on nearby residential neighborhood streets, and therefore could result in a higher level of comfort, improved quality of life, and safer traffic conditions for neighborhood residents. The Park Presidio Access Variant would also improve pedestrian and bicycle safety at the intersection of Lake Street/Park Presidio Boulevard by creating a new intersection on Park Presidio Boulevard that would be encountered by southbound traffic on Highway 1 prior to reaching Lake Street.

Alternative 4: Battery Caulfield Alternative – Due to its emphasis on residential use and inclusion of senior housing, Alternative 4 would generate 10 and 23 percent fewer vehicle trips through the 14th and 15th Avenue Gates in the AM and PM peak hours, respectively, than Alternative 1. With the Park Presidio Access Variant, Alternative 4 would result in 53 and 57 percent less traffic through the 14th and 15th Avenue Gates during the AM and PM peak hours, respectively, than Alternative 1. The Park Presidio Access Variant would also improve pedestrian and bicycle safety at the intersection of Lake Street/Park Presidio Boulevard because the new intersection would replace the Lake Street intersection as the first intersection encountered by southbound traffic on Highway 1.

3.2.2.4 Transit

The land uses associated with the PHS alternatives would generate transit trips on several Bay Area transit providers, and would most affect the three transit providers that directly serve the project site, including MUNI, Golden Gate Transit (GGT) and the Presidio's internal shuttle (PresidiGo). Trips to and

from the project site expected to be made by transit were estimated based on the expected mode split discussed in Section 3.2.2.1, Travel Demand, and then assigned to transit routes based on the geographic distribution of origins and destinations. Because some transit passengers may use more than one transit mode (e.g., transfer from MUNI to PresidiGo), the sum of transit trips made on each transit provider may exceed the total number of transit passengers. Table 12 summarizes the expected AM peak hour and PM peak hour transit trips to and from the project site by transit service provider for each alternative.

Table 12. Peak Hour Transit Trips to/from Project Site by Service Provider and Alternative

TIME PERIOD & SERVICE PROVIDER	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
AM Peak Hour				
MUNI	71	61	43	30
Golden Gate Transit	8	6	5	3
PresidiGo	37	19	14	11
PM Peak Hour				
MUNI	163	70	51	36
Golden Gate Transit	17	7	5	4
PresidiGo	76	23	17	15

Source: Wilbur Smith Associates 2004.

Alternative 1: PTMP or No Action Alternative – Alternative 1 would generate 1,557 daily transit trips. The alternative would generate 92 transit trips in the AM peak hour and 206 transit trips in the PM peak hour. If MUNI does not provide additional capacity for Routes 1, 1AX, and 1BX on California Street by 2020, the cumulative ridership due to regional growth trends and implementation of the PTMP could exceed capacity on one or more of these three routes in the inbound (toward downtown) direction in the AM peak hour. However, the Presidio is expected to contribute only two percent or less to the total projected 2020 ridership on these routes. In the PM peak hour, cumulative ridership on MUNI Route 28 could exceed capacity if additional capacity is not added to this route. In the southbound direction, projected ridership on MUNI Route 28 is expected to exceed capacity without ridership generated by the Presidio. The maximum load point for the MUNI Route 28 occurs south of Golden Gate Park, and many passengers traveling to and from the Presidio are expected to board or alight the bus at a considerable distance from the maximum load point.

GGT Route 10⁷ is the Golden Gate Transit route that directly serves the project site. Ridership on this route could slightly exceed capacity in the PM peak hour in the southbound direction if capacity is not increased beyond the current level. The Presidio is expected to contribute about 11 percent to the total PM peak hour projected ridership in 2020. Mitigation called for in the PTMP EIS, including increased frequency on MUNI lines, PresidiGo service, and monitoring of GGT routes and coordination with GGT, would reduce the effects of Alternative 1 on transit service.

Alternative 2: Infill Alternative – Alternative 2 would generate 701 daily transit trips, or 55 percent fewer than Alternative 1. In the AM peak hour, Alternative 2 would generate 69 transit trips, or 25 percent fewer than Alternative 1. In the PM peak hour, Alternative 2 would generate 80 transit trips, or 61 percent fewer than Alternative 1. Alternative 2 is expected to result in 14 percent and 57 percent less MUNI ridership in 2020 than Alternative 1 in the AM and PM peak hours, respectively. On Golden Gate Transit, Alternative 2 would result in 25 percent and 59 percent less ridership in 2020 in the AM and PM peak hours, respectively. Mitigation called for in the PTMP EIS, including increased frequency on MUNI lines, PresidiGo service, and monitoring of GGT routes and coordination with GGT, would reduce the effects of Alternative 2 on transit service.

Alternative 3: No Infill Alternative – Alternative 3 would generate 496 daily transit trips, or 68 percent fewer than Alternative 1. In the AM peak hour, Alternative 3 would generate 50 transit trips, or 46 percent fewer than Alternative 1. In the PM peak hour, Alternative 3 would generate 59 transit trips, or 71 percent fewer than Alternative 1.

Compared to Alternative 1, Alternative 3 is expected to result in 39 percent and 69 percent less MUNI ridership in 2020 in the AM and PM peak hours, respectively. On Golden Gate Transit, Alternative 3 would result in about 39 percent and 71 percent less ridership in 2020 in the AM and PM peak hours, respectively. Mitigation called for in the PTMP EIS, including increased frequency on MUNI lines, PresidiGo service, and monitoring of GGT routes and coordination with GGT, would reduce the effects of Alternative 3 on transit service.

Alternative 4: Battery Canfield Alternative – Alternative 4 would generate 427 daily transit trips, or 73 percent fewer than Alternative 1. In the AM peak hour, Alternative 4 would generate 36 transit trips, or 61 percent fewer than Alternative 1. In the PM peak hour, Alternative 4 would generate 44 transit trips, or 79 percent fewer than Alternative 1.

Compared to Alternative 1, Alternative 4 is expected to result in 58 percent and 78 percent less MUNI ridership in 2020 in the AM and PM peak hours, respectively. On Golden Gate Transit in 2020, Alternative 4 is expected to result in about 63 percent and 76 percent less ridership in 2020 in the AM and PM peak hours, respectively. Mitigation called for in the PTMP EIS, including increased frequency on MUNI lines, PresidiGo service, and monitoring of GGT routes and coordination with GGT, would reduce the effects of Alternative 4 on transit service.

⁷ Ridership data presented are for GGT Route 50. GGT Route 50 no longer exists, but GGT Route 10 follows the same alignment in San Francisco. Ridership data for GGT Route 10 are not yet available.

3.2.2.5 Pedestrians and Bicycles

The number of person trips to and from the project site expected to be made by bicycling, walking, or some other mode was calculated assuming the mode split discussed in Section 3.2.2.1, Travel Demand.

All of the alternatives assume improvements to the pedestrian and bicycle circulation network consistent with the Bikeways and Trails Master Plan (see Figure 11). In the vicinity of the project site, the Bikeways and Trails Master Plan would provide a multi-use path that would extend from Battery Caulfield Road on the west side of the site around the south side of the site to connect with Park Boulevard, which is an existing multi-use path that continues under Highway 1 to the Mountain Lake area. The Master Plan would also provide an uphill bike lane on Wedemeyer Street/Battery Caulfield Road between 15th Avenue and Washington Boulevard, a pedestrian path in the Wedemeyer Street/Battery Caulfield corridor, and pedestrian paths that connect the project site to Lobos Creek and the Baker Beach Apartments.

Alternative 1: PTMP or No Action Alternative – Alternative 1 would generate 1,604 daily pedestrian or bicycle trips. The alternative would generate 95 pedestrian or bicycle trips in the AM peak hour and 213 pedestrian or bicycle trips in the PM peak hour. The expected level of pedestrian and bicycle activity with Alternative 1 would be accommodated within the bicycle and pedestrian network planned as part of the Presidio Bikeways and Trails Master Plan.

Alternative 2: Infill Alternative – Alternative 2 would generate 658 daily pedestrian or bicycle trips, or 62 percent fewer than Alternative 1. In the AM peak hour, Alternative 2 would generate 63 pedestrian or bicycle trips, or 34 percent fewer than Alternative 1. In the PM peak hour, Alternative 2 would generate 73 pedestrian or bicycle trips, or 66 percent fewer than Alternative 1. Since Alternative 2 would generate fewer bicycle and pedestrian trips than Alternative 1, the expected level of pedestrian and bicycle activity with Alternative 2 could be accommodated within the bicycle and pedestrian network planned as part of the Presidio Bikeways and Trails Master Plan.

Alternative 3: No Infill Alternative – Alternative 3 would generate 460 daily pedestrian or bicycle trips, or 71 percent fewer than Alternative 1. In the AM peak hour, Alternative 3 would generate 45 pedestrian or bicycle trips, or 53 percent fewer than Alternative 1. In the PM peak hour, Alternative 3 would generate 53 pedestrian or bicycle trips, or 75 percent fewer than Alternative 1. The expected level of pedestrian and bicycle activity with Alternative 3 would be accommodated within the bicycle and pedestrian network planned as part of the Presidio Bikeways and Trails Master Plan.

Alternative 4: Battery Caulfield Alternative – Alternative 4 would generate 410 daily pedestrian or bicycle trips, or 74 percent fewer than Alternative 1. In the AM peak hour, Alternative 4 would generate 32 pedestrian or bicycle trips, or 66 percent fewer than Alternative 1. In the PM peak hour, Alternative 4 would generate 40 pedestrian or bicycle trips, or 81 percent fewer than Alternative 1. The expected level of pedestrian and bicycle activity with Alternative 4 would be accommodated within the bicycle and pedestrian network planned as part of the Presidio Bikeways and Trails Master Plan.

Park Presidio Access Variant – In combination with any of the action alternatives, the proposed access to Park Presidio Boulevard would improve pedestrian and bicycle safety when compared to existing conditions. By providing for an intersection north of the intersection of Lake Street/Park Presidio Boulevard, the variant would slow southbound traffic before it reaches the crosswalk and designated bicycle route on Lake Street.

3.2.2.6 Parking

Parking demand generated by the four land use alternatives has been estimated for the midday weekday, evening, and weekend conditions, based on the methodology used in the PTMP EIS. Parking demand consists of both long-term demand (i.e., employee and resident parking) and short-term demand (i.e., visitor parking). Long-term parking for non-residential land uses was estimated by determining the number of employees for each land use and applying the average mode split and vehicle occupancy from the trip generation estimates for both external and internal trips. Each employee vehicle trip was assumed to require one space per day. A long-term rate of 1.13 to 1.32 spaces per dwelling unit was used for standard residential units (depending on the mix of unit types/sizes for each alternative), and a rate of 0.27 space per dwelling unit was used for all senior housing, based on the Institute of Transportation Engineers' Parking Generation Manual, Second Edition.

Short-term parking was estimated based on the total daily visitor trips and the average turnover rate. A short-term parking turnover rate of six vehicles per space per day was applied to industrial/warehousing and office uses, ten vehicles per space per day were used for cultural/educational uses, and three vehicles per space per day was used for conference uses. Table 13 presents the estimated weekday midday, evening, and weekend parking demand for all alternatives. Detailed parking demand calculations by alternative are provided in technical memoranda describing this study's transportation analysis.

Table 13 presents a comparison of peak period (weekend) parking demand to parking supply for each alternative. Alternative 4 would generate the lowest overall parking demand, followed by Alternative 3. Peak period parking demand for Alternatives 2, 3, and 4 is 2 percent, 34 percent, and 51 percent less, respectively, than the peak period parking demand for Alternative 1.

Alternative 1: PTMP or No Action Alternative – According to the Final Plan Alternative described in the PTMP, the PHSB district was estimated to have a demand of 674 spaces, and therefore was proposed to have a parking supply of 708 spaces. The parking demand calculation assumptions for residential uses in the PTMP EIS were intended to reflect the wide range of types and sizes of residential units throughout the Presidio. The parking demand assumptions used for the calculations in the PTMP EIS have been refined for the purposes of this site-specific study, and consequently the parking demand for Alternative 1 is estimated to be 462 spaces. The parking supply of 708 parking spaces called for in the PTMP would far exceed the peak period demand, thus allowing for a reduction in this proposed parking supply.

Table 13. Parking Demand (Spaces) by Time of Day and Alternative

TIME PERIOD	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Weekday Midday	398	266	199	144
Weekday Evening	389	446	297	217
Weekend	462	454	304	228
Peak Period Demand	462	454	304	228
Proposed Supply	708	475	330	233
Surplus / (Deficit)	246	21	26	5

Source: Wilbur Smith Associates 2004.

Alternative 2: Infill Alternative – There are currently approximately 306 parking spaces on the lower plateau of the project site. Alternative 2 would increase the number of spaces on the lower plateau to 475, but 91 of these spaces would be underground or under buildings, leaving 384 surface parking spaces—a 25 percent increase from the 306 surface parking spaces currently on the lower plateau.

Alternative 2 is expected to have a peak period demand of 419 spaces, or about 2 percent less than Alternative 1. The proposed supply of 475 spaces would accommodate the estimated demand, and allow 21 additional spaces for drivers circulating to find parking spaces during peak periods.

Alternative 3: No Infill Alternative – Alternative 3 is expected to have a peak period demand of 304 spaces, or about 34 percent less than Alternative 1. The proposed supply of 330 spaces would adequately accommodate the estimated demand, and would provide about nine percent additional spaces for drivers circulating to find parking spaces.

Alternative 4: Battery Caulfield Alternative – Alternative 4 would generate the least overall parking demand, with a weekend demand for about 228 spaces in 2020, or approximately half the weekend demand expected for Alternative 1. The proposed supply of 233 spaces would accommodate the expected demand, but would allow only about two percent additional spaces for drivers circulating trying to find parking spaces.

3.2.2.7 Construction Traffic

Construction activities would include reconstruction and renovation of existing buildings, structural improvements and other seismic work, utility upgrades, and other infrastructure improvements. Construction traffic would include trucks hauling away construction debris and delivering construction materials, as well as traffic created by the construction workers. The volume of daily construction traffic would vary by alternative, depending on the extent of demolition and new construction and the duration of the construction project.

Alternative 1: PTMP or No Action Alternative – There would be no demolition or new construction with Alternative 1.

Construction vehicles associated with building rehabilitation would reach the Presidio and project site via several routes, including the Golden Gate Bridge Plaza and the slip ramp from Richardson Avenue (construction of which is expected to be complete in 2004). Construction routes through the 14th and 15th Avenue Gates would be minimized.

Construction-related traffic could create some conflicts with local and regional traffic, especially larger construction vehicles. However, because construction vehicles traveling to and from the project site would use various gates to enter/exit the Presidio and would be dispersed throughout the Bay Area, the vehicle trips on regional roadways would generally fall within the normal fluctuations in traffic volume. A Comprehensive Traffic Management Plan would be developed to provide specific routes and other measures to minimize potential traffic impacts, particularly for the residential Lake Street neighborhood immediately south of the project site.

Alternative 2: Infill Alternative – Alternative 2 would result in a maximum of 48,000 gross square feet of demolition and no more than 48,000 gross square feet of new construction. Because Alternative 2 would involve demolition and new construction, Alternative 2 would also likely result in more construction-related traffic to and from the site than Alternative 1. In addition, Alternative 2 would include underground parking. Construction traffic related to excavation for and construction of underground parking would account for about 40 to 50 percent of the estimated truck trips associated with Alternative 2. Overall, Alternative 2 is expected to generate two to three times the number of construction truck trips to and from the project site than Alternative 1, which would correspond to an average of 11 to 15 one-way truck trips per day compared to the estimated six one-way truck trips expected with Alternative 1. Although Alternative 2 would generate considerably more construction-related traffic than Alternative 1, this traffic could be controlled through a Construction Traffic Management Plan, which would specify routes and other measures to minimize potential traffic impacts, particularly for the residential Lake Street neighborhood immediately south of the project site.

Alternative 3: No Infill Alternative – Alternative 3 would result in 125,000 gross square feet of demolition and no new construction. Alternative 3 would involve substantially more demolition than Alternative 1, which would likely result in more truck trips to and from the site. Alternative 3 would not include underground parking, and therefore would not have truck trips associated with excavating soil for an underground parking structure. Overall, Alternative 3 would generate approximately 4,200 one-way truck trips, or about 62 percent more than the 2,600 one-way truck trips expected to be generated by Alternative 1. The construction period would likely be similar to or slightly less than that for Alternative 1, and Alternative 3 would generate on average about nine one-way truck trips per day on average, or about 50 percent more than the six one-way truck trips per day expected with Alternative 1. The construction-related traffic generated by Alternative 3 could be controlled through a Construction Traffic Management Plan, which would provide specific routes and other measures to minimize potential traffic impacts, particularly for the residential Lake Street neighborhood immediately south of the project site.

Alternative 4: Battery Caulfield Alternative – Alternative 4 would result in approximately 116,000 gross square feet of demolition and no more than 73,000 gross square feet of new construction. Although Alternative 4 would result in demolition and new construction activities and Alternative 1 would not, Alternative 4 would allow less overall building square footage at the project site. The construction period would be approximately 20 months and Alternative 4 would generate about ten one-way truck trips per day on average, or about 65 percent more than the number of truck trips expected with Alternative 1. This number of truck trips and the traffic that would be generated by construction workers could be controlled through a Construction Traffic Management Plan, which would provide specific routes and other measures to minimize potential traffic impacts, particularly for the residential Lake Street neighborhood immediately south of the project site.

3.2.2.8 Cumulative Effects

The analysis of Year 2020 cumulative traffic conditions includes increases in traffic volumes resulting from implementation of the PTMP (including the PHSB district), and population and employment trends for the rest of the Bay Area region. The cumulative transportation-related effects of the PHSB district were included in the transportation analysis for the PTMP EIS, and are described in this analysis for Alternative 1 (PTMP or no action alternative). Under all of the PHSB action alternatives, the PHSB district's contribution to 2020 peak hour traffic volumes on nearby streets would be less than described for Alternative 1. At the nearby intersection of Lake Street/ Park Presidio Boulevard, the PHSB alternatives are expected to contribute 15 percent or less, depending on the alternative, to the cumulative increase in PM peak hour traffic between now and 2020.

Similarly, the analysis of year 2020 cumulative transit ridership includes transit ridership attributable to the PTMP (including the PHSB district) and Bay Area regional population and employment trends. Alternatives 2, 3, and 4 are expected to comprise on average between three and five percent of the estimated cumulative increase in PM peak hour MUNI ridership on the routes serving the PHSB district, depending on the alternative.

3.2.3 MITIGATION MEASURES

The intersection of California Street/Park Presidio Boulevard is expected to operate at LOS E with all alternatives in the PM peak hour, and could not be mitigated within any of the alternatives. The Presidio as a whole would contribute two percent or less to the total peak hour traffic volumes through this intersection.

The following measures are part of the PTMP EIS and would apply to all alternatives with and without direct access to Park Presidio Boulevard, unless indicated otherwise. For measures that fall outside the Presidio, the Trust would coordinate with the City's Department of Parking and Traffic, which would have sole jurisdiction.

TR-11 Lake Street / 14th Avenue Intersection Improvements – Designate the 15th Avenue Gate for outbound traffic, and open the 14th Avenue Gate for inbound traffic. Alternatively, if the Park Presidio

Access Variant is implemented, designate both the 14th and 15th Avenue Gates for inbound traffic only. If desired prior to the intersection operations deteriorating to LOS E or F, implement right-turn-only restrictions for the minor approaches at the intersection of Lake Street/14th Avenue.

TR-15 *California Street / 14th Avenue Intersection Improvements* – If desired, prior to the intersection operations deteriorating to LOS E or F, install STOP signs on the California Street approaches to this intersection and restripe to add a right-turn lane to the northbound approach. This improvement could require removal of some on-street parking spaces. Installing STOP signs on California Street would improve the operation of this intersection to an acceptable level of service, however queues on the westbound approach could potentially extend into the intersection of California Street/ Park Presidio Boulevard. Therefore, if queues on the westbound approach to this intersection are determined to affect the operation of California Street/ Park Presidio Boulevard, a traffic signal may be warranted at the intersection of California Street /14th Avenue. A traffic signal at this location would adequately mitigate the operation of the intersection to an acceptable level of service.⁸

TR-22 *TDM Program Monitoring* – The Trust has agreed to implement a TDM Program to reduce automobile usage by all tenants, occupants, and visitors as summarized in Section 2 (also see Appendix D of the PTMP for a full description). The Trust would monitor implementation and effectiveness of the TDM program on an ongoing basis. If the TDM performance standards as described in the PTMP (Appendix D) are not being reached, the Trust will implement more aggressive TDM strategies or intensify components of the existing TDM program, such as requiring tenant participation in more TDM program elements, or implementing more frequent and/or extensive shuttle service.

TR-23 *Parking Supply* – In order for parking supply to meet, but not exceed, demand, the Trust has committed to reducing the parking supply in the future as decisions are made about future building uses and landscape treatments. In addition, the Trust seeks to ensure that sufficient parking is provided in order to meet expected demand and avoid spillover effects. At the project site, the former 233-space parking lot just east of Buildings 1818 and 1819 that is currently being used for composting activities would not revert to a parking lot in any of the alternatives, except under Alternative 1. For Alternative 1, the 708-space parking supply proposed in the PTMP EIS for the PHSB district would far exceed the demand as calculated for this study, and the parking supply could be reduced to 485 spaces and adequately meet the estimated demand of 462 spaces.

TR-25 *Transit Service Monitoring Program* – The Trust currently monitors MUNI operations and passenger loads within the Presidio. Continued monitoring of MUNI service in the Presidio, and similar monitoring of GGT service at the Presidio would indicate any capacity problems. For example, if the

⁸ In a comment letter on the PTMP EIS, the San Francisco Department of Parking and Traffic (DPT) expressed concern about the reasonableness of signalization at this intersection. Since the average delay per vehicle on the minor approaches to the intersection of California Street/14th Avenue is expected to be less than for the minor approaches to the intersection of Lake Street/14th Avenue, the alternatives to signalization developed for the intersection of Lake Street/14th Avenue would also likely improve the operation of the minor approaches of the intersection of California Street/14th Avenue. The Trust will continue to work with the San Francisco DPT to develop an acceptable mitigation measure for this intersection. Ultimately, because this intersection is within the City and County of San Francisco's jurisdiction, implementation of the measure will be at the discretion of the City and County of San Francisco.

monitoring were to reveal insufficient capacity for northbound Presidio-generated passengers during the PM peak hour, the Trust will coordinate potential improvements with the Golden Gate Bridge Highway and Transportation District.

TR-26 *Construction Traffic Management Plan* – During pre-construction activities, the contractor(s) of individual projects will work with the Trust to develop a Construction Traffic Management Plan. The plan will include information on construction phases and duration, scheduling, proposed haul routes, permit parking, staging area management, visitor safety, detour routes, and pedestrian movements on adjacent routes.

3.2.3.1 New Measures

TR-27 *California Street / 15th Avenue Intersection Improvements* (new measure) – If desired prior to the operation of both minor approaches deteriorating to LOS E or F, restrict the northbound and/or southbound approach (depending on the alternative) to right turns only with signage and striping. Because this intersection is within the City and County of San Francisco's jurisdiction, the Trust will coordinate with the San Francisco Department of Parking and Traffic to ensure the City's concurrence on the mitigation measure. Ultimately, implementation of the measure will be at the discretion of the City and County of San Francisco. The Trust will coordinate with the City and County of San Francisco to determine the contribution of each party to the cost of the improvements.

Other intersection improvement measures included in the PTMP EIS fall outside the PHSB district and vicinity, and therefore are not repeated here. Mitigation Measure TR-9 *Bicycle and Pedestrian Amenities*, would be implemented as planned improvements are funded pursuant to the adopted Presidio Trails and Bikeways Master Plan. The Trust would also continue to support improvements to MUNI service (Mitigation Measure TR-10 *Support Increased MUNI Frequencies*), and would continue operating the PresidioGo shuttle. Mitigation Measure TR-21 *Presidio-wide Parking Management*, which applies to the Crissy Field area, would not apply to the PHSB district, where the Trust's private development partner(s) would be required to manage parking to address dual goals: to avoid spillover impacts on adjacent neighborhoods and natural or recreation areas, and to discourage excessive auto ownership and auto use by project residents.

3.3 Historic Resources

3.3.1 AFFECTED ENVIRONMENT

The history and the significant buildings, structures, and landscapes of the Presidio are described on pages 68 to 76 of the PTMP EIS. This description, and the 1993 National Historic Landmark District (NHL) nomination, are incorporated here by reference, and portions relating to the PHSB district are summarized below. Further information can be found in the draft Planning and Design Guidelines included in Appendix A.

3.3.1.1 Presidio NHL

The entirety of the Presidio, including the PHS district, is designated as a NHL. In 1993, the NPS completed an update of the original 1962 landmark nomination, establishing these boundaries and defining 662 buildings, sites, structures, and objects as contributing to the significance of the NHL.

For purposes of the NHL, the Presidio's period of significance was identified as from 1776 to 1945, with themes related to the military, exploration and settlement, Hispanic heritage, and historic archaeology. Building 135 (the Golden Gate Club), dating from 1949, was the only structure from outside the period of significance that was found to contribute to the NHL, because this building was the site of the signing of the U.S. Japan Security Treaty in 1951.

Since the U.S. Army's departure and formation of the Trust, jurisdiction over the Presidio has been split between the NPS and the Trust, and approximately 40 historic buildings have been demolished,⁹ leaving about 430 contributing elements within the Trust's jurisdiction and 622 within the Presidio as a whole.

3.3.1.2 History of the PHS District

The Marine Hospital Service, a division of the U.S. Treasury, established a hospital at the project site in the 1870s. The original complex consisted of two-story wood frame buildings on the west shore of Mountain Lake, and continued to grow as needs of the hospital expanded. In 1912, the Service was reorganized and renamed the U.S. Public Health Service to reflect its role as the federal guardian of public health. In 1928, plans were completed for a new hospital building. The new building (Building 1801 or the PHS) opened in 1932 to the west of the original hospital building, which was then removed from service and demolished. Later changes included the construction of Park Presidio Boulevard as an approach to the Golden Gate Bridge, an expansion of Building 1801 in the 1950s, and development of a Nike Missile facility at Battery Caulfield north of the PHS also in the 1950s.

3.3.1.3 Contributing Buildings and Structures within the PHS District

Contributing buildings and predicted historic archaeological sites within the PHS District are shown in Figure 12. The buildings include four from the early decades of the 20th century before the 1870s-era hospital was replaced. Building 1810 and Building 1809, single-family residences on Wynan Avenue, date from 1915 and 1920 respectively. Residential quarters 1806 and 1807 date from between 1920 and 1928, and originally comprised living quarters associated with the 19th century hospital complex.

Eleven buildings on the lower plateau (Buildings 1801, 1802, 1805, 1808, and 1811 through 1815) and the immediately adjacent area (Buildings 1818 and 1819) date from 1930 to 1932, when the project site was almost entirely redeveloped. The largest building is Building 1801, which was altered in the 1950s to add two projecting wings in front, with a connecting one-story loggia and lobby. The 1950s additions obscure most of the building façade from 1932, and are not considered eligible for the National Register (Presidio Trust 2004).

⁹ Thirty-seven buildings were demolished by the NPS, fire destroyed Building 1055, and Buildings 633 and 1387 have suffered damage or structural failures resulting in their pending demolition by the Trust.

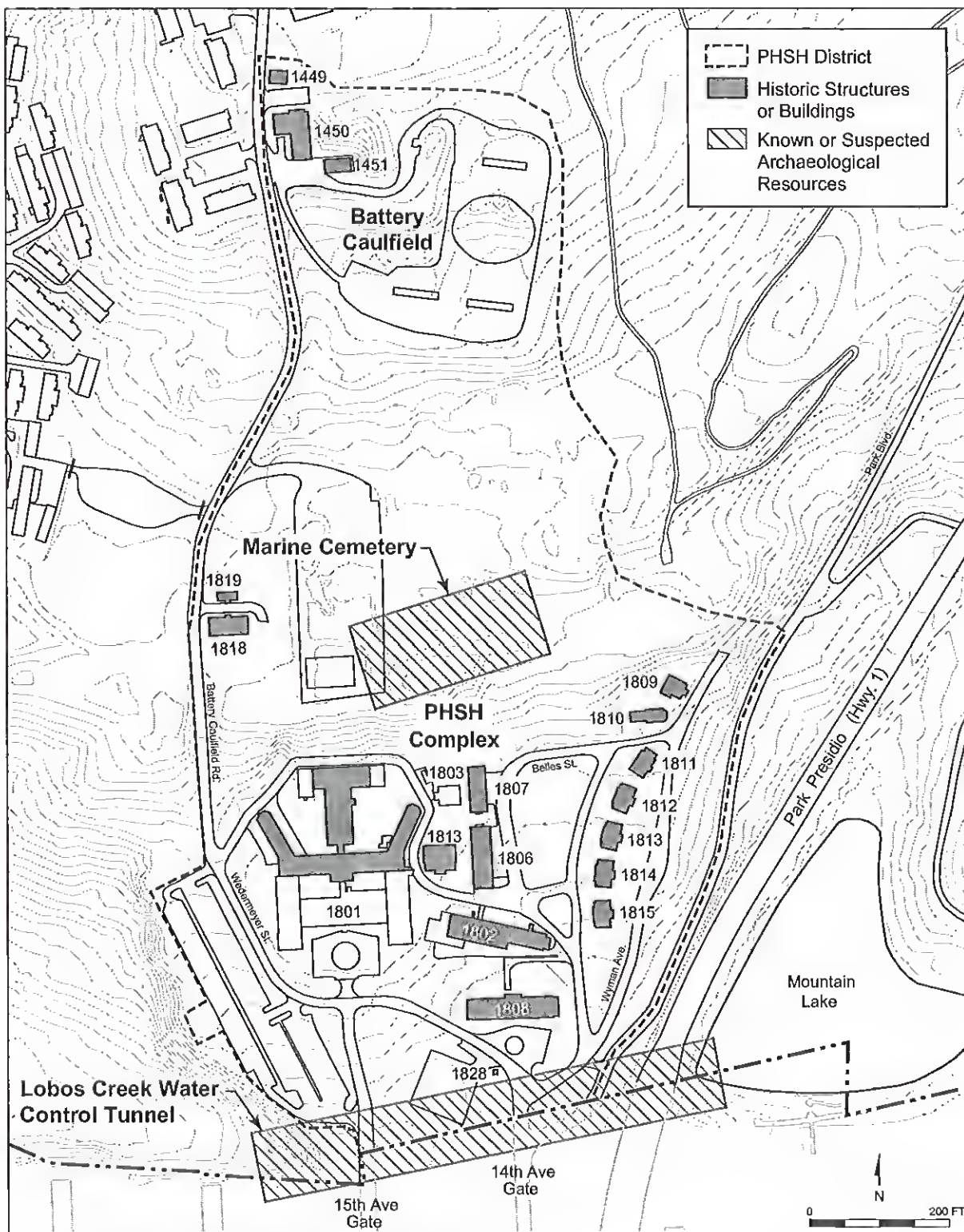


FIGURE 12. HISTORIC BUILDINGS AND ARCHAEOLOGICAL RESOURCES

Source: Presidio Trust, 2003

Other contributing buildings in the PHSH district include Buildings 1449, 1450, and 1451, which were Army structures unassociated with the nearby hospital complex. The largest building (Building 1450) was constructed as a radio transmitting station to serve the coastal defense batteries and was later used to support the adjacent missile facility.

The Nike Missile facility itself was constructed in 1953, after the agreement between the U.S. Air Force and the U.S. Army that determined that the Army would be responsible for short-range missiles such as the Nike Ajax and Nike Hercules. The Nike Missile facility at Battery Caulfield is not considered eligible for the National Register (Presidio Trust 2004).

3.3.1.4 Cultural Landscape Features within the PHSH District

Designed landscapes of the PHSH district have been altered substantially over time; however, the site's special orientation and topography remain largely unchanged from the NHL period of significance, as do a number of smaller landscaped open spaces, elements of the circulation system, and some site vegetation. The PHSH dominates the lower plateau and views from the south, with a backdrop of Monterey pines on the slope behind the building. The formal entry drive and lawn from the 1932 construction period are gone, but open space still defines the front of Building 1801 and a lawn still slopes down from the front of the houses on Wyman Avenue. A "Central Green" lies between the houses and Buildings 1806 and 1807, although the structure which once formed its northern edge no longer exists. Remains of a terraced garden include the foundations of a pair of small green houses and step up the slope behind the Central Green. Tree stands also remain near the 15th Avenue Gate, behind Building 1801, and along the Presidio Golf Course boundary.

Wyman Avenue, Belles Street, and Park Boulevard remain essentially unchanged from their pre-1932 alignment, and the site includes remnants of foundation plantings as well as trees that date from the period of significance.

3.3.1.5 Regulatory Environment

As described in the PTMP EIS (page 82), the Trust is required to comply with the National Historic Preservation Act (NHPA). Section 110 of the NHPA sets out the broad responsibilities of federal agencies to integrate preservation into their ongoing activities, and requires agencies to "minimize harm" to National Historic Landmarks like the Presidio. Section 106 of the NHPA requires federal agencies to take into account the effects of their actions on historic properties, and to seek comments on their actions from an independent reviewing agency, the Advisory Council on Historic Preservation (ACHP).

During preparation of the PTMP, the Trust consulted with the ACHP, the California State Historic Preservation Officer (SHPO), and the NPS (NPS), and executed a Programmatic Agreement (PA) regarding the plan and various operation and maintenance activities within Area B of the Presidio. This PA establishes procedures by which the Trust will satisfy its Section 106 and Section 110 responsibilities (see PTMP EIS Appendix D for the full text of the agreement).

Pursuant to Stipulation X of the PA, the Trust has submitted to the ACHP, SHPO, NPS, and concurring parties a consultation package regarding the PHSB project. That consultation package includes this EA, public comments received during the scoping period on the EA, and the draft Planning and Design Guidelines (Appendix A). Consultation under the NHPA will proceed as indicated in Stipulation X, and will be completed prior to project approval. Review of any new construction proposed as part of the project will occur as set forth in Stipulation XI, and review of historic rehabilitation proposed by the Trust's private development partner(s) as part of the project will occur during the Trust's design review and/or during the Part I and Part II Certification Process (36 CFR Part 67) established for rehabilitation tax credit projects.

3.3.2 ENVIRONMENTAL CONSEQUENCES

The potential impacts of development within the Presidio on historic resources and the cultural landscape, including the NHL, are assessed on pages 196 through 215 of the PTMP EIS. This analysis, which addresses a variety of alternatives for the PHSB district, is incorporated here by reference and summarized below. A site-specific analysis of potential impacts associated with the current range of alternatives for the project site follows.

The PTMP analysis presents a discussion of proposed changes within the PHSB district, including one scenario that would demolish all of the buildings on the site, one that would remove non-historic buildings only, one that would rehabilitate and reuse the buildings as they currently stand, and one that would build out the adopted Plan's maximum allowable new construction (130,000 square feet) and demolition (130,000 square feet).

The analysis concludes that demolition of historic buildings within the PHSB district would have an adverse effect on the NHL, but that rehabilitation and reuse of the buildings as they currently exist or rehabilitation and reuse following demolition of non-historic additions would have a beneficial effect on the NHL. The analysis also indicates that if non-historic square footage is removed and replaced with buildings elsewhere within the PHSB district, new (replacement) space would be sited and designed to reinforce historic character-defining features of the PHSB district in conformance with the PTMP planning principles and planning district guidelines. These principles and guidelines require that new construction be compatible with the historic setting of the Presidio, and that character-defining features of the PHSB district be maintained. As a result, the EIS concludes that new construction would not impair the integrity of the NHL.

3.3.2.1 Alternative 1: PTMP or No Action Alternative

Building rehabilitation and reuse under this alternative would have a beneficial effect on historic architectural resources. Historic portions of Building 1801 and other buildings in the PHSB district would be rehabilitated in accordance with the Secretary of the Interior's Standards and returned to active use. Physical changes within the PHSB district would also comply with the planning principles and the planning district guidelines in the PTMP and with the Guidelines for Rehabilitating Buildings at the

Presidio of San Francisco (ARG 1995). Where historic fabric is proposed for removal, it would be documented according to Historic American Building Survey standards.

Non-historic elements within the PHSB district, including the non-historic wings on the front of Building 1801 and the connecting loggia, would also be rehabilitated and maintained in this alternative. The wings would retain their current configuration and appearance, although any blue panels or other facade materials that are missing or damaged would be replaced in kind.

Rehabilitating and retaining existing non-historic additions to the PHSB district would not affect historic resources, since there would be no appreciable change in the appearance of the historic resources when compared to existing conditions or to the conditions that existed when the National Register eligibility of the PHSB district was established. Retaining non-historic elements would not, however, return the historic hospital building to its original prominence or expose its principal facade. Alternative 1 would not involve new construction, and thus would have no impacts associated with the introduction of new buildings within the PHSB district.

In combination with remediation of Landfills 8 and 10, and with planned trail and access improvements, Alternative 1 would involve landscape changes within the PHSB district. These changes would include re-creation of a formal entry drive from the 14th Avenue Gate to Building 1801, reconfiguration of parking areas on the lower plateau, and additions to remnant planted borders and designed landscape areas throughout the lower plateau. All changes would be required to conform to the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes (NPS 1992b).

In conformance with the PTMP, Alternative 1 would include installation of interpretive materials in some building lobbies and at key wayside locations throughout the PHSB district. Specifically, signs and/or landscape treatments would commemorate the site of the former Marine Hospital Cemetery, and would explain the history of the Nike Missile Site and the significance of the Public Health Service and individual buildings within the district. Pursuant to the Presidio Trust Act, the NPS would be asked to assist the Trust in developing interpretive materials. The Fort Point and Presidio Historical Association and the California Heritage Council (CHC) have also agreed to assist the Trust.

3.3.2.2 Alternative 2: Infill Alternative

Building rehabilitation and reuse in Alternative 2 would have a beneficial effect on historic architectural resources, similar to Alternative 1. Historic portions of Building 1801 and other buildings in the PHSB district would be rehabilitated in accordance with the Secretary of the Interior's Standards and returned to active use. Where historic fabric is proposed for removal, it would be documented according to Historic American Building Survey standards.

Physical changes within the PHSB district would comply with the site-specific Planning and Design Guidelines prepared for the PHSB district and included in draft form in Appendix A. These guidelines, which are intended to provide specific direction to project designers and ensure compliance with the planning principles and the planning district guidelines in the PTMP, will be finalized following public review and consultation with the SHPO, ACHP, and other signatories to the PA.

Non-historic elements within the PHS district, including the non-historic wings on the front of Building 1801, would be rehabilitated and retained in this alternative, similar to Alternative 1. However, the one-story loggia and lobby connecting the wings would be removed to reveal the central portion of the historic facade, and the wings themselves would receive a new facade treatment. In addition, non-historic additions at the rear of Building 1801 may be removed and the front wings may be lowered in height, either by removing a rooftop wind screen or by removing the wind screen and up to two stories of the wings. These changes would improve the wings' compatibility with the historic building behind them, and would therefore have a beneficial effect on historic architectural resources.

New construction would occur at up to three locations within the PHS district under this alternative. A new three-story building (about 14,000 square feet) would be constructed at the north end of the Central Green, a new two-story duplex would be constructed at the south end of Wyman Avenue, and building space could be added to the central wing at the rear of Building 1801. In conformance with the draft Planning and Design Guidelines as well as the PTMP planning district guidelines and the Secretary of the Interior's Standards, all new construction would be compatible with surrounding historic buildings in scale, massing, and design, but would be clearly distinguishable as contemporary, rather than mimicking an earlier style or period. The new buildings sited north of the Central Green and at the south end of Wyman Avenue would be located where buildings existed on the site previously, and would reinforce the campus-like setting by fitting onto compact sites, close to existing buildings as called for in the PTMP planning district guidelines.

In combination with remediation of Landfills 8 and 10, and with planned trail and access improvements, Alternative 2 would involve landscape changes within the PHS district. These changes would include re-creation of a formal entry drive from the 14th Avenue Gate to Building 1801, reconfiguration of parking areas on the lower plateau and elimination of the parking area at Landfill 8, and additions to remnant planted borders and designed landscape areas throughout the lower plateau. Underground parking proposed for the area in front of and beneath the PHS would increase the amount of landscaping in the area, raise the forecourt to the height of the building's first floor, and also introduce access and egress points on the south and west sides of the building.

All site changes would be required to conform with the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes (NPS 1992b), and would be preceded by preparation of a detailed cultural landscape assessment for areas within and adjacent to the leasehold boundary proposed by the Trust's private development partner(s).

In conformance with the PTMP, Alternative 2 would include installation of interpretive materials in some buildings lobbies and at key wayside locations throughout the PHS district. Specifically, signs and/or landscape treatments would commemorate the site of the former Marine Hospital Cemetery, and would explain the history of the Nike Missile Site and the significance of the Public Health Service and individual buildings within the complex. Pursuant the Presidio Trust Act, the NPS would be asked to assist the Trust in developing interpretive materials. The Fort Point and Presidio Historical Association and the CHC have also agreed to assist the Trust.

3.3.2.3 Alternative 3: No Infill Alternative

Building rehabilitation and reuse in Alternative 3 would have a beneficial effect on historic architectural resources, similar to Alternative 1. Historic portions of Building 1801 and other buildings in the PHSB district would be rehabilitated in accordance with the Secretary of the Interior's Standards and returned to active use. Where historic fabric is proposed for removal, it would be documented according to Historic American Building Survey standards.

Physical changes within the PHSB district would comply with the site-specific Planning and Design Guidelines prepared for the PHSB district and included in draft form in Appendix A. These guidelines, which are intended to provide specific direction to project designers and ensure compliance with the planning principles and the planning district guidelines in the PTMP, will be finalized following public review and consultation with the SHPO, ACHP, and other signatories to the PA.

Non-historic elements within the PHSB district, including the non-historic wings on the front of Building 1801, would be removed in this alternative, revealing the historic façade. Non-historic portions of Building 1802 would also be removed, along with the entirety of Building 1803. All of these changes would have a beneficial effect on historic architectural resources. Alternative 3 would also not involve new construction, and thus would have no impacts associated with the introduction of new buildings within the PHSB district.

In combination with remediation of Landfills 8 and 10, and with planned trail and access improvements, Alternative 3 would involve landscape changes within the PHSB district. These changes would include re-creation of a formal entry drive from the 14th Avenue Gate to Building 1801, reconfiguration of parking areas on the lower plateau and elimination of the parking area at Landfill 8, and additions to remnant planted borders and designed landscape areas throughout the lower plateau. All changes would be required to conform to the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes (NPS 1992b) and would be preceded by preparation of a detailed cultural landscape assessment for areas within and adjacent to the leasehold boundary proposed by the Trust's private development partner(s).

In conformance with the PTMP, Alternative 3 would include installation of interpretive materials in some building lobbies and at key wayside locations throughout the PHSB district. Specifically, signs and/or landscape treatments would commemorate the site of the former Marine Hospital Cemetery, and would explain the history of the Nike Missile Site and the significance of the Public Health Service and individual buildings within the complex. Pursuant the Presidio Trust Act, the NPS would be asked to assist the Trust in developing interpretive materials. The Fort Point and Presidio Historical Association and the CHC have also agreed to assist the Trust.

3.3.2.4 Alternative 4: Battery Caulfield Alternative

Building rehabilitation and reuse in Alternative 4 would have a beneficial effect on historic architectural resources, similar to Alternative 1. Historic portions of Building 1801 and other buildings in the PHSB district would be rehabilitated in accordance with the Secretary of the Interior's Standards and returned to

active use. Where historic fabric is proposed for removal, it would be documented according to Historic American Building Survey standards.

Physical changes within the PHS district would comply with the site-specific Planning and Design Guidelines prepared for the PHS district. These guidelines, which are intended to provide specific direction to project designers and ensure compliance with the planning principles and the planning district guidelines in the PTMP, will be finalized following public review and consultation with the SHPO, ACHP, and other signatories to the PA.

The non-historic wings on the front of Building 1801 would be removed in this alternative, revealing the historic façade, similar to Alternative 3. Additional, non-historic additions may also be removed, along with non-historic Building 1803. These changes would have a beneficial effect on historic architectural resources.

New construction would occur at two locations within the PHS district under this alternative. A new three-story building (about 14,000 square feet) would be constructed at the north end of the Central Green, and up to 64 apartments (about 56,000 square feet) would be constructed at Battery Caulfield on the upper plateau. In conformance with the guidelines included in Appendix A, as well as the PTMP planning district guidelines and the Secretary of the Interior's Standards, all new construction would be compatible with surrounding historic buildings in scale, massing, and design, but would be clearly distinguishable as contemporary, rather than mimicking an earlier style or period. The new building sited north of the Central Green would be located where buildings existed on the site previously and would reinforce the campus-like setting by fitting onto a compact site, close to existing buildings as called for in the PTMP planning district guidelines. The new construction at Battery Caulfield would introduce buildings where none have existed in the past, although they would be scaled to ensure that the lower plateau and the PHS maintain their prominence, with the PHS district's principal density and development.

In combination with remediation of Landfills 8 and 10, and with planned trail and access improvements, Alternative 4 would involve landscape changes within the PHS district. These changes would include re-creation of a formal entry drive from the 14th Avenue Gate to Building 1801, reconfiguration of parking areas on the lower plateau and elimination of the parking area at Landfill 8, and additions to remnant planted borders and designed landscape areas throughout the lower plateau. All changes would be required to conform to the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes (NPS 1992b), and would be preceded by preparation of a detailed cultural landscape assessment for areas within and adjacent to the leasehold boundary proposed by the Trust's private development partner(s).

In conformance with the PTMP, Alternative 4 would include installation of interpretive materials in some building lobbies and at key wayside locations throughout the PHS district. Specifically, signs and/or landscape treatments would commemorate the site of the former Marine Hospital Cemetery, and would explain the history of the Nike Missile Site and the significance of the Public Health Service and individual buildings within the complex. Pursuant the Presidio Trust Act, the NPS would be asked to

assist the Trust in developing interpretive materials. The Fort Point and Presidio Historical Association and the CHC have also agreed to assist the Trust.

3.3.2.5 Park Presidio Access Variant

Providing direct access between the PHSB district and Park Presidio Boulevard in combination with Alternatives 2, 3, or 4 would require some changes to the PHSB district's internal roads and landscaping, but not to the extent that significant impacts on the cultural landscape would occur. Specifically, the new access point would require that Wyman Avenue and Hays Street join and turn west earlier than they do currently, intersecting with a modified intersection or traffic circle at the front of Building 1808. A formal entry drive from the 14th Avenue Gate would also intersect this intersection, since this gate would be open for inbound access to the site (as would the 15th Avenue Gate). Also, an open foreground would be maintained in front of Building 1801, and the landscaped open areas in front of the Wyman Avenue homes would be preserved. Park Boulevard would continue to exist as a trail and service road immediately west of Park Presidio Boulevard, but its alignment would also be modified somewhat at its southern terminus.

Consistent with the alternatives analyzed above, all changes would be required to conform with the Secretary of the Interior's Guidelines for the Treatment of Cultural Landscapes (NPS 1992b) and would be preceded by preparation of a detailed cultural landscape assessment for areas within and adjacent to the leasehold boundary proposed by the Trust's development partner(s).

3.3.2.6 Cumulative Effects

All alternatives would have a beneficial effect on historic architectural resources because they would involve rehabilitation and reuse of historic structures within the PHSB district. When the rehabilitation of historic buildings at the PHSB district is considered in combination with the ongoing rehabilitation of other historic buildings at the Presidio, the cumulative effect would also be beneficial. Since the Presidio became a national park site, approximately 167 historic residential buildings, along with approximately 750,000 square feet of non-residential space, have been rehabilitated. The PHSB project would add seven historic residential buildings (duplexes and single family homes) and about 250,000 square feet of nurses' dormitories and non-residential space to this total.

Landscape and circulation changes associated with each alternative would be carefully designed and constructed to avoid adverse effects on character-defining features of the cultural landscape. The same is true for changes associated with other planned projects in the area, such as the remediation of landfill sites, the creation of trails, establishment of a trailhead and scenic overlook as called for in the Presidio Trails and Bikeways Master Plan, and the ecological enhancement of natural areas. Thus, with the mitigation measures agreed to as part of the PTMP, cumulative impacts on the cultural landscape of the PHSB district and the NHLD would be avoided.

- *PHAF-10 (Lobos Creek Water Control)* – Remains include the Hotalling Tunnel and parts of early water supply systems connecting Mountain Lake to the Spring Valley Water Works on Lobos Creek (1857-?).
- *PPAF-3 (Mountain Lake)* – This water source and the surrounding area have high potential for prehistoric archaeological sites (but no documented incidence of discovery), including the temporary encampment used in the spring of 1776 by a Spanish expedition led by Juan Bautista de Anza in the area adjacent to Mountain Lake prior to establishment of El Presidio de San Francisco in the Main Post area that summer.

3.4.2 ENVIRONMENTAL CONSEQUENCES

Potential impacts on archaeological resources are assessed on pages 215 to 219 of the PTMP EIS. This analysis is incorporated here by reference and expanded upon below. Reference is made to the Programmatic Agreement executed between the Trust, NPS, SHPO, and ACHP regarding routine maintenance projects and projects that implement the PTMP. A copy of the PA is included in Appendix D of the PTMP EIS and is available for review at the Trust's offices and website (www.presidio.gov).

3.4.2.1 Alternative 1: PTMP or No Action Alternative

Under this alternative, no building demolition or replacement construction would occur. Therefore, direct effects on archaeological resources would be minimal and limited to such ground-disturbing activities as infrastructure upgrades, pavement removal, and landscaping. Under the terms of Stipulation XII, Archaeology, of the PA, an Archaeological Management Assessment and Monitoring Program would be prepared to determine whether subsurface coring or trenching and/or test excavations are required prior to ground disturbance, and ground-disturbing activities and construction would be closely observed (PTMP EIS Mitigation Measures CR-8 and CR-9). In accordance with the terms of Stipulation XIII, Discoveries, of the PA, if it appears that a previously unidentified property that could be eligible for inclusion in the National Register or could contribute to the NHL could be affected, or a known historic property could be affected in an unanticipated manner, the Trust would stop any potentially harmful activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the property until it concludes consultation with the State Historic Preservation Officer (PTMP EIS Mitigation Measures CR-14 and CR-15). Other terms of Stipulations XII, Archaeology, and XIII, Discoveries, of the PA as reiterated in the PTMP mitigation measures listed below would also be implemented to protect and manage the archaeological record.

3.4.2.2 Alternative 2: Infill Alternative

Under this alternative, the potential for direct effects on archaeological resources would be slightly greater than Alternative 1 due to ground-disturbing activities associated with underground parking and the approximately 48,000 square feet of demolition and infill construction at locations within the lower plateau. Similar to Alternative 1, however, the measures identified as stipulations of the PA and

committed to as part of project implementation would avoid or minimize harm to archaeological resources.

3.4.2.3 Alternative 3: No Infill Alternative

Ground-disturbing activities associated with demolition of approximately 125,000 square feet of non-historic buildings on the lower plateau would have the likelihood of encountering archaeological resources. Similar to Alternative 1, the measures identified as stipulations of the PA and committed to as part of project implementation would avoid or minimize harm to archaeological resources.

3.4.2.4 Alternative 4: Battery Caulfield Alternative

Direct effects on archaeological resources due to 56,000 square feet of new construction within Battery Caulfield would be unlikely since ground-disturbing activities would take place within a heavily modified area where there are no known or suspected resources. Demolition of 116,000 square feet of building area on the lower plateau would likely encounter archaeological resources. Similar to Alternative 1, the measures identified as stipulations of the PA and committed to as part of project implementation would avoid or minimize harm to archaeological resources on the lower plateau.

3.4.2.5 Park Presidio Access Variant

Grading and construction of the Park Presidio Access Variant would occur in an area of the PHS district that was disturbed when Highway 1 was originally constructed in the 1930s. As a result, the likelihood of encountering archaeological resources is minimal. Nonetheless, measures identified in the PA would avoid or minimize harm to archaeological resources if unexpected discoveries occur.

3.4.2.6 Cumulative Effects

Based on the cumulative analyses in the PTMP EIS, excavation or grading associated with development plans could disturb or destroy archaeological resources. Cumulative impacts on known prehistoric archaeological sites or historic archaeological resources are, in general, not expected to be adverse. Ground-disturbing activities and construction projects would be closely observed in the vicinity of sensitive archaeological areas, and archaeology stipulations in the PA would be adhered to; these stipulations include preparation of an Archaeological Management Assessment and Monitoring Program (AMA/MP) prior to ground disturbance. Because new construction would involve site investigations prior to excavation and/or monitoring for archaeological resources as needed during excavation, the likelihood that archaeological resources would be destroyed or damaged without appropriate attention to recordation and recovery would be minimized.

3.4.3 MITIGATION MEASURES

The following measures are included in the PA and PTMP EIS and would apply to all alternatives:

CR-8 Archaeological Management Assessment and Monitoring Program – The Trust will require its private development partner(s) to retain the services of a qualified archaeologist who will develop an

AMA/MP for areas and undertakings within and adjacent to their proposed leasehold boundary. This program will ensure that all planned site disturbances are reviewed by a qualified archaeologist prior to final design and/or approval. In addition to the AMA/MP, the project archaeologist will prepare and the Trust will review an archaeological research design for any archaeological investigations that are required, and/or test excavations or data recovery from prehistoric or historic sites that are known or discovered. The Trust's management of archaeological properties is reviewed annually in accordance with Stipulation XXI of the PA. The AMA/MP and any research design required pursuant to this measure would be incorporated into the Trust's annual report.

CR-9 Ground-Disturbing Activities – Ground-disturbing maintenance activities and construction projects will be closely observed in the PHSH district's lower plateau to discover, document, protect, and manage the archaeological record of the Presidio. The AMA/MP described in Mitigation Measure CR-8 will specify whether archival research, subsurface coring or trenching, and/or test excavations are required prior to ground disturbance, and if so, where. Archaeological monitoring is appropriate in areas of predicted archaeological sensitivity or for sampling purposes in areas that are not considered sensitive when the natural ground surface is obscured by paving or fill, or in other instances where a pedestrian survey or archaeological testing cannot reasonably be accomplished. Any required archaeological monitoring will be implemented in accordance with the AMA/MP and prepared by qualified personnel, and the project archaeologist will have the authority to stop excavation, grading or other construction activities in the vicinity of the discoveries to allow for investigation, evaluation, and (if appropriate) recovery. If historic properties or prehistoric properties are discovered during implementation of an undertaking, a detailed report will be prepared. Should circumstances arise where the Trust cannot address archaeological concerns in a manner consistent with the AMA/MP, the Trust will notify the SHPO. Following completion of all ground-disturbing activities, the project archaeologist will be required to prepare a written report of their findings for inclusion in the Trust's annual report.

CR-11 Excavation Permits – The Trust will require all excavation permits to undergo archaeological review by qualified personnel, as defined in Stipulation III of the PA, prior to initiation of the requested activity. The excavation clearance process is included as Appendix B to the PA.

CR-13 Curation of Archaeological Collections – All records associated with excavations and excavated materials not subject to the Native American Graves Protection and Repatriation Act (NAGPRA) that are deemed important for preservation will be accessioned, catalogued, and managed in accordance with 36 CFR Part 79, "Curation of Federally-Owned and Administered Collections."

CR-14 Discoveries – If it appears that an excavation in the PHSH district would affect a previously unidentified property that could be eligible for inclusion in the National Register, or could contribute to the NHL, or affect a known historic property in an unanticipated manner, the Trust will stop any potentially harmful activities in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the property until it concludes consultation with the SHPO.

CR-15 Treatment of Discoveries – If the newly discovered property has not previously been included in or determined eligible for the National Register and provisions for its treatment are not contained in an

approved research design or AMA/MP, the Trust may assume that the property is eligible for purposes of the PA. The Trust will notify the NPS and SHPO at the earliest possible time and consult to develop actions that shall take the effects of the undertaking into account. The Trust will notify the SHPO of any time constraints, and the Trust and the SHPO will mutually agree upon time frames for this consultation, which will not exceed 30 days. If treatment of the discovery is not included in an approved research design or AMA/MP, the Trust will develop written recommendations reflecting its consultation with the NPS and SHPO and, as necessary, will present a plan and schedule to implement these recommendations.

PTMP EIS Mitigation Measures CR-10 *Archaeological Grid and Database* and CR-12 *Archaeological Management Plan for El Presidio* would not apply to the PHSB project, except that any reports or excavated materials not subject to NAGPRA would become the property of the Trust and would be incorporated into the Presidio's archaeological grid map and database.

3.5 Air Quality

3.5.1 AFFECTED ENVIRONMENT

The existing air quality environment of the Presidio and its regulatory context are described on pages 124 to 126 of the PTMP EIS and incorporated here by reference. Information relevant to the PHSB district is summarized and updated below.

3.5.1.1 Air Quality Management

The nine-county San Francisco Bay Area Air Basin has a history of recorded violations of federal and state ambient air quality standards for ozone, carbon monoxide (CO), and inhalable particulate matter less than ten microns in diameter (PM₁₀). The U.S. EPA has classified the Bay Area a moderate non-attainment area for ozone, and as a maintenance (attainment) area for carbon monoxide. The California Air Resources Board (CARB) has given the Bay Area state-level non-attainment status for ozone and PM₁₀.

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for managing compliance with the ambient air quality standards in the Bay Area. With the State Implementation Plan (SIP) and the Clean Air Plan (CAP), the BAAQMD identifies the steps that must be taken to attain and maintain the federal and state standards, respectively. Local jurisdictions can cooperate with these efforts by implementing transportation control measures to reduce emissions from motor vehicles. The Trust's Transportation Demand Management (TDM) program would implement the relevant transportation control measures from the 2000 BAAQMD CAP (PTMP EIS, page 125).

In order to ensure that the proposed alternatives would not disrupt goals of attainment, federal actions must include a formal conformity determination if the action would cause total direct and indirect emissions of non-attainment pollutants to exceed specified thresholds. For any federal action in the Bay Area causing more than 100 tons per year of an ozone precursor (either reactive organic gases [ROG] or

nitrogen oxides [NO_x]) or CO, the general conformity rule would apply (40 CFR 51.853). Federal actions causing emissions below these thresholds are presumed to conform to the SIP.

The Trust manages the air quality effects of land use development by managing construction activities and the demand for transportation. Development at the Presidio must conform to the Presidio-wide TDM program that would reduce emissions from motor vehicle sources. The Trust also coordinates land uses to avoid collocation of sensitive receptors and substantial sources of pollution. Through these efforts, the Trust can ensure that its actions would be consistent with the SIP and the CAP and that it would not disrupt efforts to attain the ambient air quality standards.

3.5.1.2 Air Quality Conditions and Monitoring

Air quality at the Presidio is generally superior to that of most urban areas because the park is generally upwind of most sources of pollution. Violations of the state and federal standard for ozone persist in the Bay Area inland from San Francisco. Pollutants from San Francisco tend to be carried into the more sheltered areas of the region and cause violations of the standards there. Because of the City's location and climate, neither federal nor state ozone standards have recently been exceeded in San Francisco. Only state standards for PM₁₀ have been recently exceeded locally. Concentrations of carbon monoxide in the Bay Area have complied with federal and state standards since 1991. Additional information about ambient air quality data is available in the PTMP EIS (pages 125 to 126).

Toxic air contaminants also affect the region. Because the effects of these contaminants are largely localized, ambient standards are not used to characterize their concentrations. Contaminants that are emitted primarily from motor vehicles account for over one-half of the average calculated cancer risk for Bay Area residents. Ambient benzene levels declined dramatically in 1996 with the advent of Phase 2 reformulated gasoline. Due largely to reductions in air toxics from motor vehicles, the calculated average cancer risk has been significantly reduced in recent years. Based on 2000 ambient monitoring data, the calculated cancer risk is 167 in one million, which is about 45 percent less than what was observed five years earlier (BAAQMD 2001).

3.5.1.3 Local Source Inventory

Traffic-related emissions of criteria pollutants are generated along the roadways that surround and bisect the PHS district. Traffic congestion at the Presidio or on nearby roadways or intersections can occasionally result in localized elevated concentrations (hotspots) of carbon monoxide if heavy traffic coincides with stagnant weather conditions. Diesel trucks, buses, and other equipment are sources of particulates in diesel exhaust, which are considered to be a toxic air contaminant.

Existing stationary sources of air pollutants within the PHS district are limited to a central boiler system and small printing and metal casting operation operated by a tenant, both within Building 1802. The boiler system is a natural gas-fired steam generator, rated at approximately seven million British thermal units per hour (MMBtu/hr). It currently operates to provide heating and steam for the occupied buildings adjacent to Building 1802. Emissions from the boiler are limited to those typically associated with natural gas combustion, including less than 25 pounds per day (lb/day) of NO_x and a very small quantity

(less than 0.05 lb/day) of formaldehyde and other combustion-related pollutants. Other units that may have been historically located at the PHS district are either non-operational or have been removed. The existing boiler is exempt from BAAQMD permitting requirements and federal performance standards because the unit has a heat-input capacity of less than 10 MMBtu/hr. The tenant's printing and metal casting operation is also exempt from permitting because of its small capacity and minimal potential emissions (BAAQMD 2000).

3.5.2 ENVIRONMENTAL CONSEQUENCES

Air quality impacts of land use and development under the PTMP are assessed on pages 252 to 260 of the PTMP EIS and incorporated here by reference. The PTMP EIS is supplemented here by analysis of issues specific to the PHS project alternatives under consideration.

3.5.2.1 Alternative 1: PTMP or No Action Alternative

Under this alternative, no building demolition or replacement construction would occur. Limited emissions from rehabilitation of existing buildings (with this alternative and all other alternatives) would warrant control. Consistent with BAAQMD recommendations for construction activity (BAAQMD 1999), rehabilitation activities having the potential to cause dust (PM_{10}) emissions (e.g., for infrastructure upgrades, which could cause small amounts of ground disturbance) would be subject to basic control measures (PTMP EIS Mitigation Measure NR-20).

Motor vehicle use and operation of minor stationary sources would be associated with the new uses (with this alternative and all other alternatives). Emissions from traffic at congested intersections can, under certain circumstances, cause a localized build-up of CO concentrations. Although regional monitoring data demonstrates that CO concentrations have recently been well below the applicable standards, the potential for localized increases in CO concentrations from increased traffic warrants investigation. Use of the Caltrans-approved CALINE4 dispersion model and guidance from the BAAQMD (BAAQMD 1999) allows a comparison of CO concentrations with the applicable ambient air quality standards. Table 14 shows that traffic (with this alternative and all other alternatives, including the possible Park Presidio Access Variant) would not be likely to cause a violation of the CO standards.

Emissions that would be caused throughout the region by new motor vehicle trips and increased consumption of natural gas and other energy are estimated using the URBEMIS2002 emission model developed by the CARB and shown in Table 15. Mobile source emission estimates reflect the implementation of the Trust TDM program, which would minimize the activity of mobile sources (PTMP EIS Mitigation Measure NR-21).

The central boiler system and tenant activities at Building 1802 could remain in service under this alternative. The area source estimates provided by URBEMIS2002 capture the emissions that could be associated with any foreseeable small new stationary sources (e.g., steam-generating boilers) that may be necessary to provide basic utilities, even though none has been specifically proposed (for this alternative and all other alternatives). Any new sources for heating or steam generation would likely be small

enough to be exempt from BAAQMD permitting requirements, and no notable sources of air toxics or odors would occur. For projects subject to the California Environmental Quality Act (CEQA), the BAAQMD recommends a threshold of significance of 80 pounds per day for ROG, NO_x, and PM₁₀. Because emissions from mobile and area sources would not exceed these thresholds, these emissions would not be significant in the regional context.

3.5.2.2 Alternative 2: Infill Alternative

Approximately 48,000 square feet of infill development would be built and 48,000 square feet of building area would be demolished with this alternative. Demolition and ground-disturbing activities associated with rehabilitation and construction would cause short-term emissions of construction dust and equipment exhaust that would be greater than in Alternative 1. Basic control measures and demolition techniques that would be part of the project implementation (PTMP EIS Mitigation Measures NR-20 and NR-22) would minimize emissions during the demolition and construction phases. Impacts on localized and regional air quality from motor vehicle emissions and other operating-phase emissions would be less than those illustrated for Alternative 1 because of a reduced demand for transportation. The TDM program would reduce these emissions further (PTMP EIS Mitigation Measure NR-21).

3.5.2.3 Alternative 3: No Infill Alternative

Emissions of construction dust and equipment exhaust would be greater than in Alternative 1 because of demolition of approximately 125,000 square feet of building area on the lower plateau. Basic control measures and measures for demolition techniques that would be part of the project implementation (PTMP EIS Mitigation Measures NR-20 and NR-22) would minimize emissions during the demolition and construction phases. Impacts on localized and regional air quality from motor vehicle emissions and other operating-phase emissions would be less than those illustrated for Alternative 1, and the TDM program would reduce these emissions further.

3.5.2.4 Alternative 4: Battery Caulfield Alternative

Emissions of construction dust and equipment exhaust would be greater than in Alternative 1 because of demolition of approximately 116,000 square feet of structures on the lower plateau and 73,000 square feet of new construction including 56,000 square feet within Battery Caulfield. Basic control measures for demolition techniques that would be part of the project implementation (PTMP EIS Mitigation Measures NR-20 and NR-22) would minimize emissions during the demolition and construction phases. Impacts on localized and regional air quality from motor vehicle emissions and other operating-phase emissions would be less than those illustrated for Alternative 1, and the TDM program would reduce these emissions further.

3.5.2.5 Park Presidio Access Variant

As shown in Table I4, implementation of the Park Presidio Access Variant would have a negligible effect on localized CO concentrations. Construction activities would cause short-term emissions of dust and equipment exhaust that would be reduced through implementation of basic control measures.

3.5.2.6 Cumulative Effects and General Conformity

Localized CO concentrations shown in Table 14 are based on traffic volumes that include project traffic with background traffic, which is projected to increase over time. In this way, Table 14 takes into consideration cumulative effects on localized air quality. Air quality impacts from motor vehicle emissions and other operating-phase emissions (shown in Table 15) would contribute to ongoing violations of federal or state ambient air quality standards for ozone and PM₁₀ in the region. To minimize the cumulative effects of these impacts, the Trust would ensure that the alternatives would be consistent with the regional CAP by requiring implementation of the TDM program (PTMP EIS Mitigation Measure NR-21). Additionally, any new stationary sources associated with the alternatives would either be exempt or subject to the permitting regulations and requirements of the BAAQMD, which would ensure consistency of those emissions with the SIP and CAP.

Short-term emissions from construction activities could cause cumulative air quality effects if other nearby projects were to be under construction at the same time. In the vicinity of the PHS district, there are existing landfill sites that are environmentally contaminated and require cleanup. The remediation work may occur simultaneously with demolition or construction phases of the PHS alternatives. Basic control measures that would be part of the project implementation would also be part of other nearby projects at the Presidio.

The proposed alternatives would not disrupt goals of attainment. Implementation of the TDM program ensures consistency with the CAP, and conformity with the SIP is ensured because the relatively small scale of the proposed demolition and construction activities (a maximum of 73,000 square feet new construction for any alternative) would not create emissions in excess of the 100-ton-per-year threshold of the general conformity rule (40 CFR 51.853).

3.5.3 MITIGATION MEASURES

The following measures are found in the PTMP EIS and apply to all alternatives.

NR-20 Basic Control Measures – To reduce construction-generated particulate matter (PM₁₀) emissions, construction contractors will implement as appropriate the BAAQMD's recommended control measures for emissions of dust during construction. Basic control measures are: (1) water all active construction areas at least twice daily; (2) cover all trucks hauling soil, sand, and other loose materials or require trucks to maintain at least two feet of freeboard; (3) pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas; (4) sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas; and (5) sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

NR-21 Transportation Control Measures (TCMs) – The Presidio Trust Transportation Demand Management (TDM) program will implement the TCMs of the 2000 CAP to minimize air emissions from Presidio-related activities. In addition, consistent with the 2000 CAP, the Trust will coordinate land uses to provide buffer zones and avoid conflicts from toxic contaminants or odors.

procedures state that noise impacts from traffic are serious enough to warrant consideration of abatement when noise levels for a project approach or exceed the NAC or when they substantially exceed existing noise levels. The NAC are shown in Table 16.

Table 16. FHWA Noise Abatement Criteria (Hourly dBA)

	ACTIVITY CATEGORY	$L_{eq}(H)$	$L_{10}(H)$
A	Lands on which serenity and quiet are of extraordinary significance and serve as important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)	60 (Exterior)
B	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.	67 (Exterior)	70 (Exterior)
C	Developed lands, properties, or activities not included in Categories A or B above.	72 (Exterior)	75 (Exterior)
D	Undeveloped lands.	None Applicable	None Applicable
E	Residences, motels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.	52 (Interior)	55 (Interior)

Source: 23 Code of Federal Regulations, Part 772, Table 1.

Notes: Either L_{eq} or L_{10} (but not both) may be used on a project.

The San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code, 1994) contains the local noise control regulations that apply to the urban neighborhoods surrounding the Presidio. The noise ordinance regulates construction noise, fixed-source noise, and unnecessary, excessive, or offensive noise disturbances within the City. Sections 2907 and 2908 of the San Francisco Police Code provide that:

- Construction noise is limited to 80 dBA at 100 feet from the equipment during daytime hours (7:00 AM to 8:00 PM). Impact tools are exempt provided that they are equipped with intake and exhaust mufflers.
- Nighttime construction (8:00 PM to 7:00 AM) that would increase ambient noise levels by 5 dBA or more is prohibited unless a permit is granted by the Director of Public Works.

To protect new multi-family residential units associated with development alternatives (including apartments, condominiums, long-term care facilities, and other attached dwellings) from unacceptable exterior noise environments (PTMP EIS, page 128), the Trust would enforce noise insulation requirements equivalent to the California Noise Insulation Standards (Part 2, Title 24, California Code of Regulations) with building permit conditions.

3.6.1.2 Existing Noise Conditions

The existing noise environment of the PHS district is characterized by existing traffic, most notably on Park Presidio Boulevard, and natural noise sources. The PHS district is generally quieter than the surrounding urban environment, although there is a moderate level of human activity due to the current uses, including use of the parking lots.

Existing daytime noise levels in the areas surrounding the PHS district are in the range of approximately 52 to 62 dBA L_{eq} , depending on the receptor's proximity to traffic. In the neighborhood immediately adjacent to the PHS district, the exterior noise levels at the residences nearest to the Presidio gates are about 58 dBA L_{eq} . At the 14th Avenue Gate, the exterior noise is a steady background noise caused by traffic on Park Presidio Boulevard, while at the 15th Avenue Gate it is a fluctuating noise caused by traffic periodically passing through the gate.

At each of the monitoring locations examined for this analysis, traffic noise dominates the existing daytime noise environment. Away from traffic noise and noise from other human activity, the natural environment provides noise levels commonly below 60 dBA. All noise levels within the PHS district are below the 67-dBA NAC threshold for recreation areas, residences, schools, and hospitals. Noise levels at the measurement location closest to the Nike Swale wetland area (near Building 1818) are also below the more restrictive 57-dBA NAC for areas where serenity and quiet are of extraordinary significance. The results of the noise monitoring program for daytime noise levels are summarized in Table 17.

3.6.1.3 Noise-Sensitive Areas

Examples of noise-sensitive areas that need to be protected include residences, schools, day care centers, parks, hospitals, convalescent centers, and recreational facilities. Existing and planned noise-sensitive uses include: the existing Lone Mountain Children's Center (in Building 1806); residences within the City of San Francisco (especially along 14th and 15th Avenues) and at the Presidio including housing associated with the development alternatives; and tranquil historic monuments or natural settings (such as the proposed improvements to the former Marine Hospital Cemetery below the Nike Swale).

3.6.2 ENVIRONMENTAL CONSEQUENCES

Noise effects of the PTMP and plan alternatives are assessed on pages 260 to 268 of the PTMP EIS and incorporated here by reference. The PTMP EIS analysis is supplemented here by analysis of the issues specific to the alternatives being considered for the PHS project.

3.6.2.1 Alternative 1: PTMP or No Action Alternative

On a short-term basis, limited noise would occur from rehabilitation activity (with this alternative and all other alternatives). Much of the rehabilitation work would occur within the existing buildings, which would shield outside areas from noise. Outdoor work would include infrastructure upgrades, pavement removal, and landscaping. No building demolition or replacement construction would occur. All

Table 17. Summary of Short-Term Noise Measurements, PHSB District

SITE	DESCRIPTION	TIME	DOMINATING NOISE SOURCE	HOURLY L _{EQ} (dBA)	L ₁₀ (dBA)
R1	Wyman Avenue Housing at Building 1811	7:30 AM	Park Presidio Traffic	60.2	62
R2	15 th Avenue Gate	7:55 AM	15 th Avenue Traffic	57.8	62
R3	Battery Caulfield at Building 1451	8:25 AM	Battery Caulfield Road Traffic	61.4	66
R4	Upper Plateau at Building 1818	9:10 AM	Battery Caulfield Road Traffic	53.6	56
R5	14 th Avenue Gate (closed to traffic)	9:45 AM	Park Presidio Traffic	58.0	60
R10 (*)	PHSB District, Wyman Avenue at Building 1810	9:05 AM	Park Presidio Traffic	59.6	61

Source: Aspen Environmental Group 2003; except (*) from 2001, as shown in Table 8, PTMP EIS.

Notes: Tests were duration of 15 to 30 minutes, taken on November 19, 2003.

rehabilitation activities would be required to implement measures to manage construction-type noise (PTMP EIS Mitigation Measure NR-23). With these measures in place, the short-term noise from rehabilitation would be minimized.

Proposed rehabilitation of the PHSB complex would introduce noise-sensitive housing to an area of the Presidio that is near a major traffic corridor that can cause excessive noise (Park Presidio Boulevard). The results of noise monitoring (see Table 17) illustrate that at buildings on Wyman Avenue, or at other buildings proposed for rehabilitation for residential use elsewhere on the lower or upper plateau, the existing noise levels are within the 67 dBA NAC. This means that there are no areas within the PHSB district where the existing noise would preclude future residential use. Additionally, the Trust would enforce noise insulation requirements equivalent to the California Noise Insulation Standards (Part 2, Title 24, California Code of Regulations) for new residences. New residences within the PHSB district (under this or other alternatives) would therefore not be exposed to excessive noise.

Operation and occupation of the rehabilitated PHSB district would cause increased traffic noise that could be noticeable for residents in the adjacent neighborhoods. Because no location in the PHSB district exceeds the FHWA NAC shown in Table 16, traffic noise increases are evaluated by considering whether they would cause noise to approach or exceed the NAC. The PTMP EIS illustrated that, although noticeable traffic noise increases (greater than 3 dBA) would occur on roadways providing access to the PHSB district, future traffic would not cause noise levels to approach or exceed the NAC (PTMP EIS,

page 265). Traffic noise levels caused by this alternative (and other alternatives) in the vicinity of the 14th and 15th Avenue Gates are shown in Table 18.

Table 18. Traffic Noise Levels In the Vicinity of PHS Gates by Alternative

LOCATION	ALTERNATIVE 1 (dBA)	ALTERNATIVE 2 (dBA)	ALTERNATIVE 3 (dBA)	ALTERNATIVE 4 (dBA)	ALTERNATIVE 2 W/ VARIANT (dBA)	ALTERNATIVE 3 W/ VARIANT (dBA)	ALTERNATIVE 4 W/ VARIANT (dBA)
14 th Ave. Gate	63.8	63.4	63.2	63.1	63.0	62.9	62.7
15 th Ave. Gate	61.4	60.6	60.4	60.3	59.0	58.8	58.6

Source: Aspen Environmental Group 2004.

Notes: Traffic noise levels in terms of $L_{eq}(h)$ for 2020 PM peak hour traffic at 50 feet from the center line of the roadway at the gate, except for noise levels at the 14th Avenue Gate under the Park Presidio Access Variant, which are the combined noise levels of this access at 100 feet plus the 14th Avenue Gate at 50 feet.

Includes all pass-through traffic, inbound and outbound in future year 2020.

Noise from traffic under this alternative would increase above existing conditions, but not to levels that would exceed those anticipated under the PTMP EIS. Traffic noise levels at residences and the former Marine Hospital Cemetery near Battery Caulfield Road were not estimated because none of the alternatives would notably affect traffic volumes on Battery Caulfield Road. The noise levels shown in Table 18 indicate that the traffic noise impacts experienced by residences in the City of San Francisco would not exceed the NAC.

3.6.2.2 Alternative 2: Infill Alternative

Approximately 48,000 square feet of infill development would be built and 48,000 square feet of building area would be demolished with this alternative. Demolition and construction activities would cause noise levels to be elevated for the short term of the construction phase. Demolition and most construction activities are capable of causing routine noise levels of approximately 79 to 84 dBA at 100 feet from the activity if noise control is not used, or 69 to 74 dBA with noise control. Demolition activities could include mechanical wrecking and use of an on-site temporary concrete crushing operation, especially if concrete would be recycled on-site. Construction could require use of dozers, loaders, trucks, cranes, compressors, and pneumatic tools. During the periods of demolition and concrete crushing operation, and periods of heavy truck activity for material removal or delivery, noise levels for receptors near the site or along roads providing access to the site could be considerable.

Demolition, rehabilitation, and construction would generally occur more than 400 feet from any residences in the City of San Francisco. An exception to this would be if implementation of the new alternative access to Park Presidio Boulevard occurs. The edge of this new roadway segment would be approximately 100 feet from the nearest residence on 14th Avenue, and the majority of the construction work for the new intersection would occur about 300 feet from homes. (See further discussion in Section 3.6.2.5, Park Presidio Access Variant, below.) Other exceptions would include minor roadway

improvements near the gates, parking lot improvements, landscaping, or infrastructure upgrades. The non-historic wings of Building 1801 are more than 400 feet from the nearest City residence.

All demolition, rehabilitation, and construction activities would be required to implement measures to manage construction-type noise (PTMP EIS Mitigation Measure NR-23). With these measures in place, short-term noise levels would be minimized.

Traffic generated by occupation and operation of this alternative would be less than in Alternative 1. The noise levels shown in Table 18 indicate that residences in the City of San Francisco would not experience significant traffic noise impacts.

3.6.2.3 Alternative 3: No Infill Construction

Although this alternative would not involve infill construction, construction-related noise would be greater than in Alternative 1 due to demolition of approximately 125,000 square feet of building area on the lower plateau. Demolition activities could include mechanical wrecking and use of an on-site temporary concrete crushing operation, especially if concrete would be recycled on-site. The measures identified in the PTMP EIS and committed to as part of project implementation would avoid or minimize noise impacts during all demolition and rehabilitation phases.

The traffic that would be generated by occupation and operation of this alternative would be less than Alternative 1. The noise levels shown in Table 18 indicate that residences in the City of San Francisco would not experience significant traffic noise impacts.

3.6.2.4 Alternative 4: Battery Caulfield Alternative

Construction-related noise would be greater than in other alternatives because of demolition of approximately 116,000 square feet of building area on the lower plateau and 73,000 square feet of new construction including 56,000 square feet within Battery Caulfield. The measures identified in the PTMP EIS and committed to as part of project implementation would avoid or minimize noise impacts during all demolition, rehabilitation, and construction phases.

The traffic that would be generated by occupation and operation of this alternative would be less than Alternative 1. The noise levels shown in Table 18 indicate that residences in the City of San Francisco would not experience significant traffic noise impacts.

3.6.2.5 Park Presidio Access Variant

The new access would help to remove some traffic from 14th and 15th Avenues and locate it within the Presidio, farther from homes in the adjacent neighborhood. Although it would be entirely within the Presidio, the noise from traffic on this alternative access route would still be audible at the 14th Avenue Gate. The closest edge of the roadway for the new alternative access would be approximately 100 feet from the nearest existing home in the City of San Francisco. In this analysis, noise from traffic at the 14th Avenue Gate is combined with noise from traffic on the new access, and the combined noise level for the

home is shown in Table 18. As with other alternatives, the noise impacts for the new access alternatives would not exceed the NAC.

3.6.2.6 Cumulative Effects

Noise from PHSB district development, including operational traffic noise, would coincide with anticipated region-wide growth in traffic noise, especially from traffic on Park Presidio Boulevard, which could increase by roughly 1.2 dBA L_{eq} between existing conditions and 2020. Noise from any PHSB alternative would be localized and would only affect the area adjacent to or in the vicinity of the PHSB district. Other Presidio construction projects such as the remediation of existing landfills in the area could overlap with PHSB development, creating additional noise. All construction projects would be required to conform to measures to manage construction-type noise, ensuring that short-term noise increases would be minimized. The cumulative effects of other foreseeable changes in traffic noise were analyzed in the PTMP EIS and were found to be minor (PTMP EIS, page 369). Under any alternative, PHSB development would not exceed the noise levels anticipated in the PTMP EIS.

3.6.3 MITIGATION MEASURES

The following measures are found in the PTMP EIS and apply to all alternatives.

NR-23 General Construction/Demolition Noise – During construction, contractors and other equipment operators will be required to comply with the San Francisco Noise Ordinance (San Francisco Municipal Code, Section 2907b), which requires that each piece of powered equipment, other than impact tools, emit noise levels of not more than 80 A-weighted decibels (dBA) at 100 feet. To reduce noise impacts, barriers will be erected around construction sites and stationary equipment such as compressors; this will reduce noise by as much as 5 dBA. To further reduce noise impacts on visitors, some construction sites will be temporarily closed, and appropriate barriers placed at a distance of 250 feet from the sites.

NR-24 Traffic Noise Reduction – Vehicle traffic throughout the Presidio represents the major source of existing and future noise, especially from U.S. Highways 101 and 1. Although the Trust cannot control the level of noise produced by privately owned vehicles, it can control which types of transit vehicles are used at the Presidio. The Trust will use and encourage other city and transit providers to select transit vehicles that produce less noise pollution. Energy-conserving government vehicles will be used by maintenance and other divisions. If possible, electric or other alternative vehicles will be used to reduce noise levels.

PTMP EIS Mitigation Measure NR-25 (Traffic Noise Monitoring and Attenuation) applies to areas some distance from the PHSB district and does not apply to the proposed alternatives.

3.7 Visual Resources

3.7.1 AFFECTED ENVIRONMENT

Important views and other visual resources are described on pages 122 to 123 of the PTMP EIS. This description is incorporated here by reference, and portions relevant to the PHSB district are summarized below and expanded upon as necessary.

3.7.1.1 Visual Characteristics of the PHSB District and Surrounding Areas

The Presidio as a whole is a major visual resource for the San Francisco Bay Area, and its forested ridges and green aspect provide marked contrast to the adjacent urban landscape. The historic forest is one of many scenic resources, and stands in and around views toward the Golden Gate Bridge, the Pacific Ocean, and the Bay. Nearby are steep bluffs covered with gray-green coastal scrub, picturesque valleys, and distinguished historic buildings.

Developed areas within the PHSB district are in severely deteriorated condition, and many buildings and paved areas provide an unsightly contrast to the beautiful natural surroundings and scenic vistas. Building 1801, the PHSB (see Figure 13), is particularly derelict, with cyclone fencing around its perimeter and visibly deteriorated building materials on all facades. The non-historic wings almost completely obscure the historic front façade.

Other areas on the lower plateau, such as the houses along Wyman Avenue and the paved parking areas south and west of the PHSB, are equally deteriorated. Where buildings have been rehabilitated, such as Building 1808, or where views are available toward surrounding areas, visual characteristics are more pleasing. For example, the hillside north of the Central Green once housed a terraced garden that is long overgrown, and now forms a forested “buffer” between the lower plateau and the upper plateau (see Figure 14).

On the upper plateau, paved areas are worn and untidy, and include an abandoned tennis court, an abandoned parking area that now provides space for stock piles of green waste and compost, and the former Nike Missile Site at Battery Caulfield. Built into the slope at two elevations, Battery Caulfield is an unsightly mix of heavy equipment, stock-piled materials, and broken pavement (see Figure 15). The only evidence of the former missile installation is rusted metal doors that lie flush to the ground surface, and the soil berms that were constructed or retained nearby.

Visually attractive resources on the upper plateau include vegetated areas between and around Battery Caulfield and the composting area. Here a trail wanders through an area where the natural landscape seems close at hand, and trees delineate the edge of the Presidio Golf Course.



FIGURE 13. BUILDING 1801, EXISTING CONDITIONS

Source: Presidio Trust, 2003

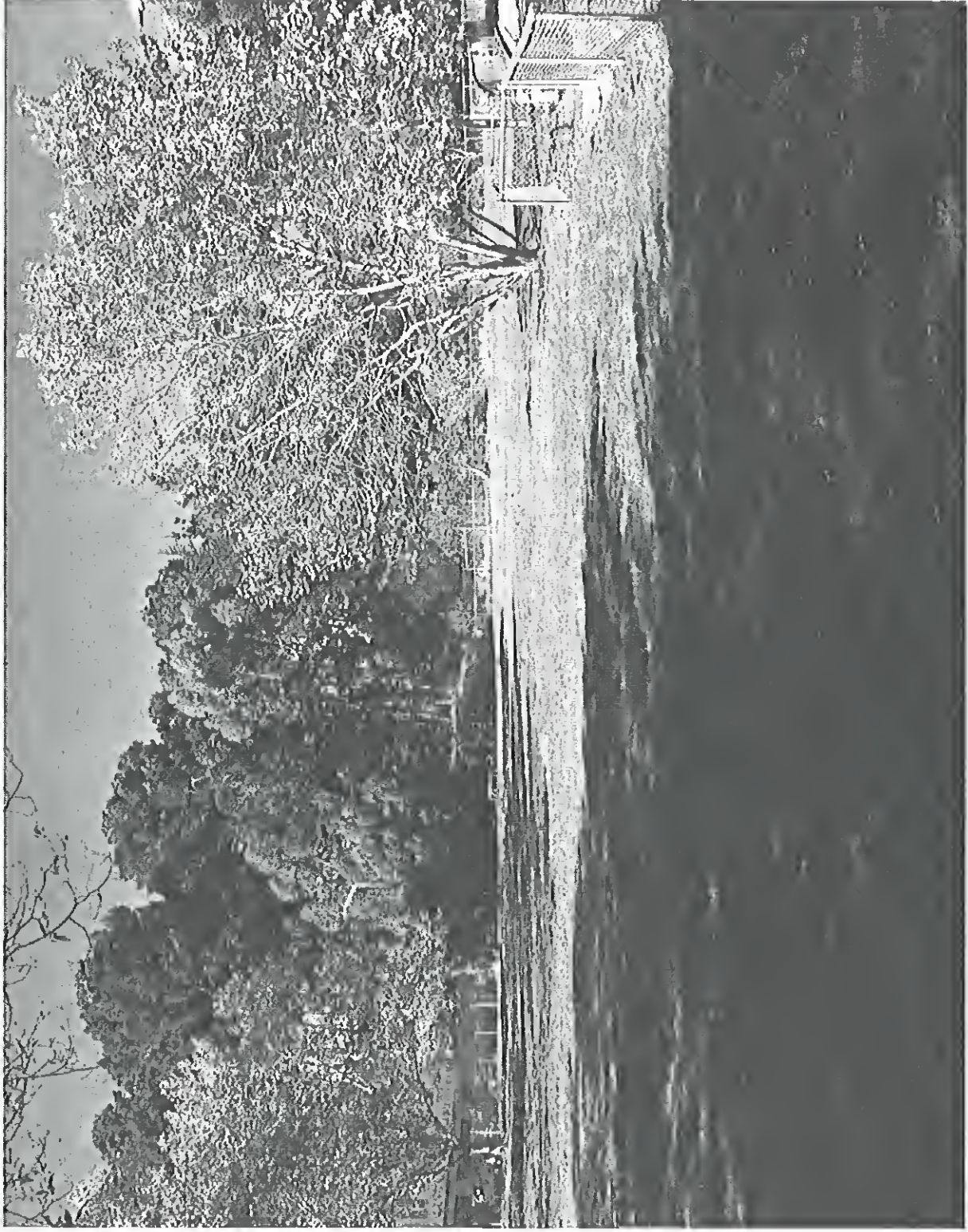


FIGURE 14. VIEW LOOKING NORTH FROM THE CENTRAL GREEN. EXISTING CONDITIONS

Source: Presidio Trust, 2003

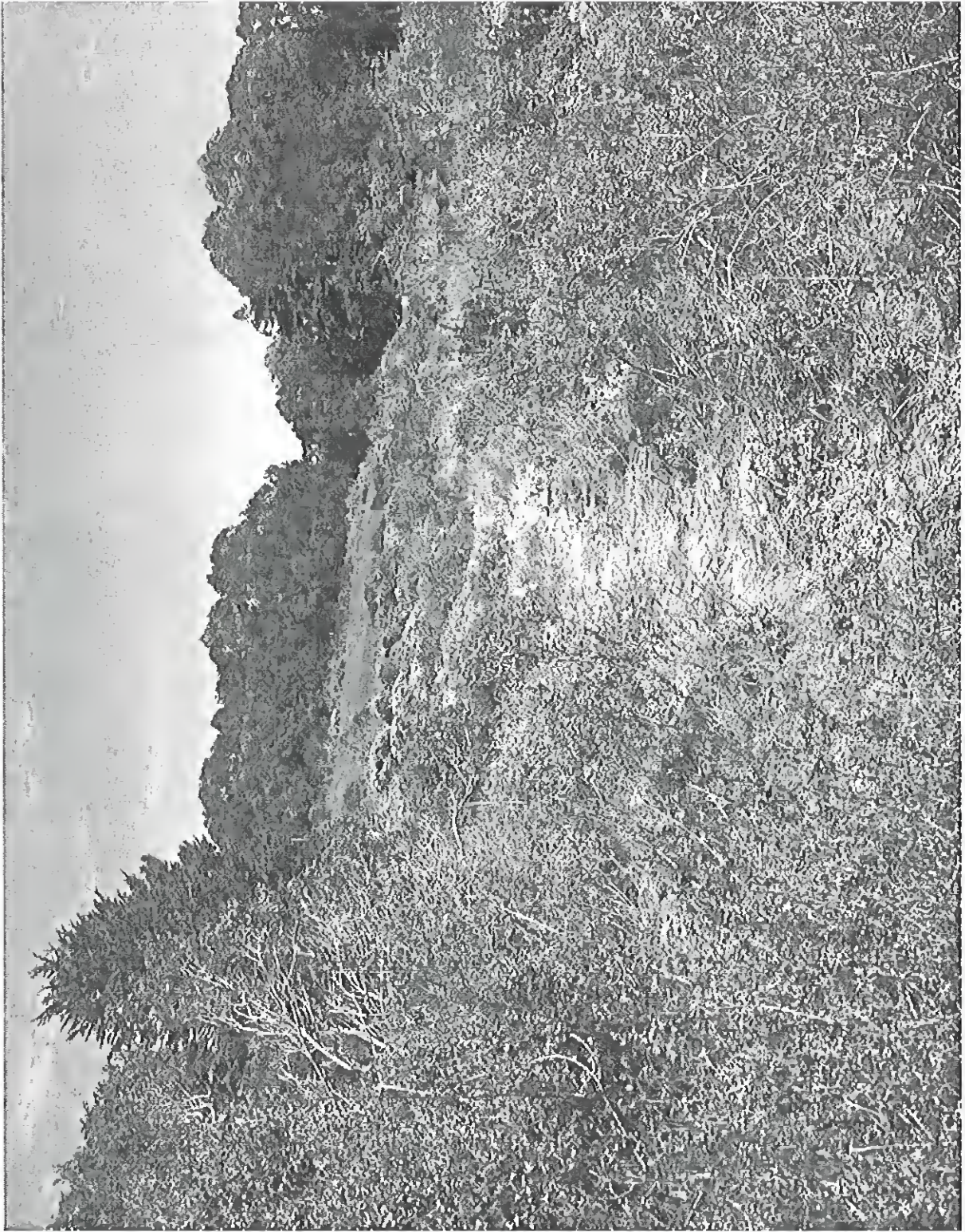


FIGURE 15. VIEW TOWARD BATTERY CAULFIELD, EXISTING CONDITIONS

Source: Presidio Trust, 2003

3.7.1.2 Important Views

Dramatic views are available from Battery Caulfield, from the PHSB, and from many other areas on the lower plateau (see Figure 16). Of particular note are views from the parking lot west of the PHSB, where the Presidio Trails and Bikeways Master Plan calls for development of a scenic vista point to take advantage of spectacular views of Lobos Valley and the Pacific Ocean. Looking east, views from upper stories of the PHSB hold Mountain Lake in their foreground with an urban panorama of the City's neighborhoods beyond.

3.7.2 ENVIRONMENTAL CONSEQUENCES

The potential impacts of use and development within the Presidio on visual resources are assessed on pages 247 to 252 of the PTMP EIS. No impacts specific to the PHSB district were identified, and the analysis concluded that the visual character of the Presidio would not be substantially altered. This analysis is supplemented below, with an assessment of the issues specific to the alternatives being considered for the PHSB project.

3.7.2.1 Alternative 1: PTMP or No Action Alternative

By rehabilitating and reusing existing buildings, improving the surrounding landscape, and accommodating planned access and open space improvements, Alternative 1 would positively affect the visual character of the PHSB district. Chain-link fencing on the lower plateau would be removed, damaged building fabric would be repaired or replaced in kind, parking areas would be re-landscaped, and open space areas would be improved.

The views to and from the PHSB district shown in Figures 13 to 15 would not change dramatically as a result of Alternative 1, because all historic and non-historic elements would be retained, and no new construction would occur. However, the planned use of 14th Avenue as an entrance to the PHSB district would reemphasize motorists' view toward Building 1808 upon arrival to the site, and the planned construction of a scenic overlook west of the PHSB would emphasize pedestrians' view toward Lobos Valley and the Pacific Ocean.

New activity on the site would mean an increase in lighting, both within buildings and within adjacent parking areas and landscape zones. Exterior lighting would be focused downward, and conformance with PTMP EIS Mitigation Measure NR-7 *Artificial Light* would minimize related impacts.

3.7.2.2 Alternative 2: Infill Alternative

Similar to Alternative 1, Alternative 2 would rehabilitate and reuse existing buildings, improve the surrounding landscape, and accommodate planned access and open space improvements, positively affecting the visual character of the PHSB district. Chain-link fencing on the lower plateau would be removed, damaged building fabric would be repaired or replaced, parking areas would be re-landscaped, and open space areas would be improved. In addition, Alternative 2 would re-clad the non-historic wings of the PHSB and would remove the central loggia and lobby structure connecting the non-historic wings

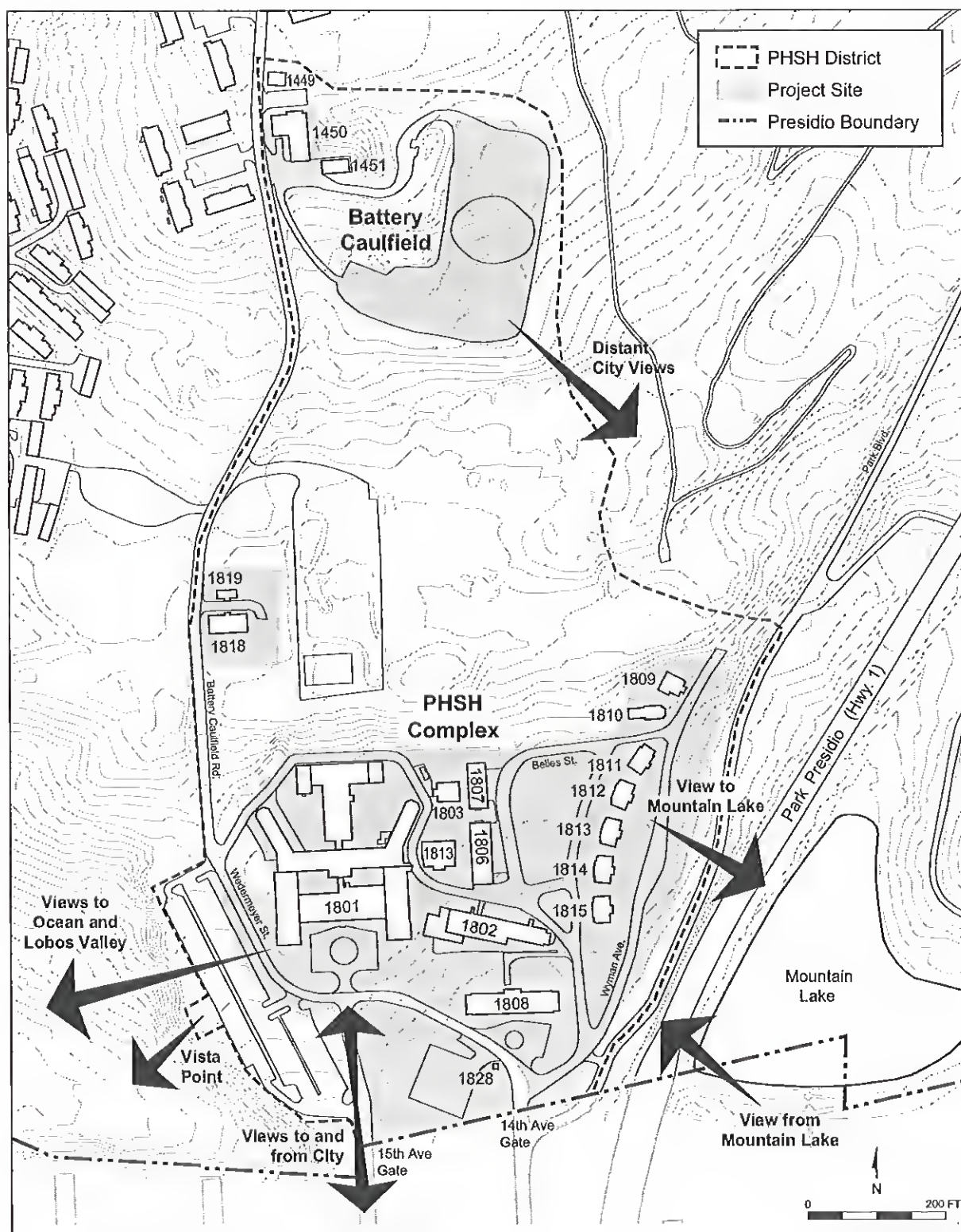


FIGURE 16. IMPORTANT VIEWS TO AND FROM THE PHS DISTRICT

Source: Presidio Trust, 2003

of the building, revealing the principal façade of the historic building (see Figure 17). Alternative 2 would also potentially remove up to two floors of the non-historic wings to reduce their visual mass and reveal the cornice line of the historic building façade (see Figure 18).

New construction of a small residential building at the south end of Wyman Avenue and of another residential building at the north end of the Central Green (see Figure 19) would change the visual appearance in these areas of the lower plateau, but would be designed to conform to PTMP planning district guidelines and to be compatible with surrounding buildings.

Views to and from the PHSB district would not change dramatically, although re-cladding the non-historic wings of the PHSB would remove the blue façade material, which is jarring to some contemporary viewers, and removal of the central loggia/lobby as well as possibly some floors of the wings would reduce the visual bulk of the building when viewed from the south. Introduction of underground parking would increase green space, particularly in front and to the west of the PHSB. In addition, the planned use of 14th Avenue as an entrance to the PHSB district would reemphasize motorists' view toward Building 1808 upon arrival to the site, and the planned construction of a scenic overlook west of the PHSB would emphasize pedestrians' view toward Lobos Valley and the Pacific Ocean.

New activity on the site would mean an increase in lighting, both within buildings and within adjacent parking areas and landscape zones. Exterior lighting would be focused downward, and conformance with PTMP EIS Mitigation Measure NR-7 *Artificial Light* would minimize related impacts.

3.7.2.3 Alternative 3: No Infill Alternative

Similar to Alternative 1, Alternative 3 would rehabilitate and reuse existing buildings, improve the surrounding landscape, and accommodate planned access and open space improvements, positively affecting the visual character of the PHSB district. Chain-link fencing on the lower plateau would be removed, damaged building fabric would be repaired or replaced, parking areas would be re-landscaped, and open space areas would be improved. In addition, Alternative 3 would remove non-historic additions to the PHSB, dramatically changing the building's appearance (see Figure 20).

Other views to and from the PHSB district shown in Figures 13 to 15 would not change dramatically as a result of Alternative 3, because no new construction would occur. However, the planned use of 14th Avenue as an entrance to the PHSB district would reemphasize motorists' view toward Building 1808 upon arrival to the site, and the planned construction of a scenic overlook west of the PHSB would emphasize pedestrians' view toward Lobos Valley and the Pacific Ocean.

New activity on the site would mean an increase in lighting, both within buildings and within adjacent parking areas and landscape zones. Exterior lighting would be focused downward, and conformance with PTMP EIS Mitigation Measure NR-7 *Artificial Light* would minimize related impacts.

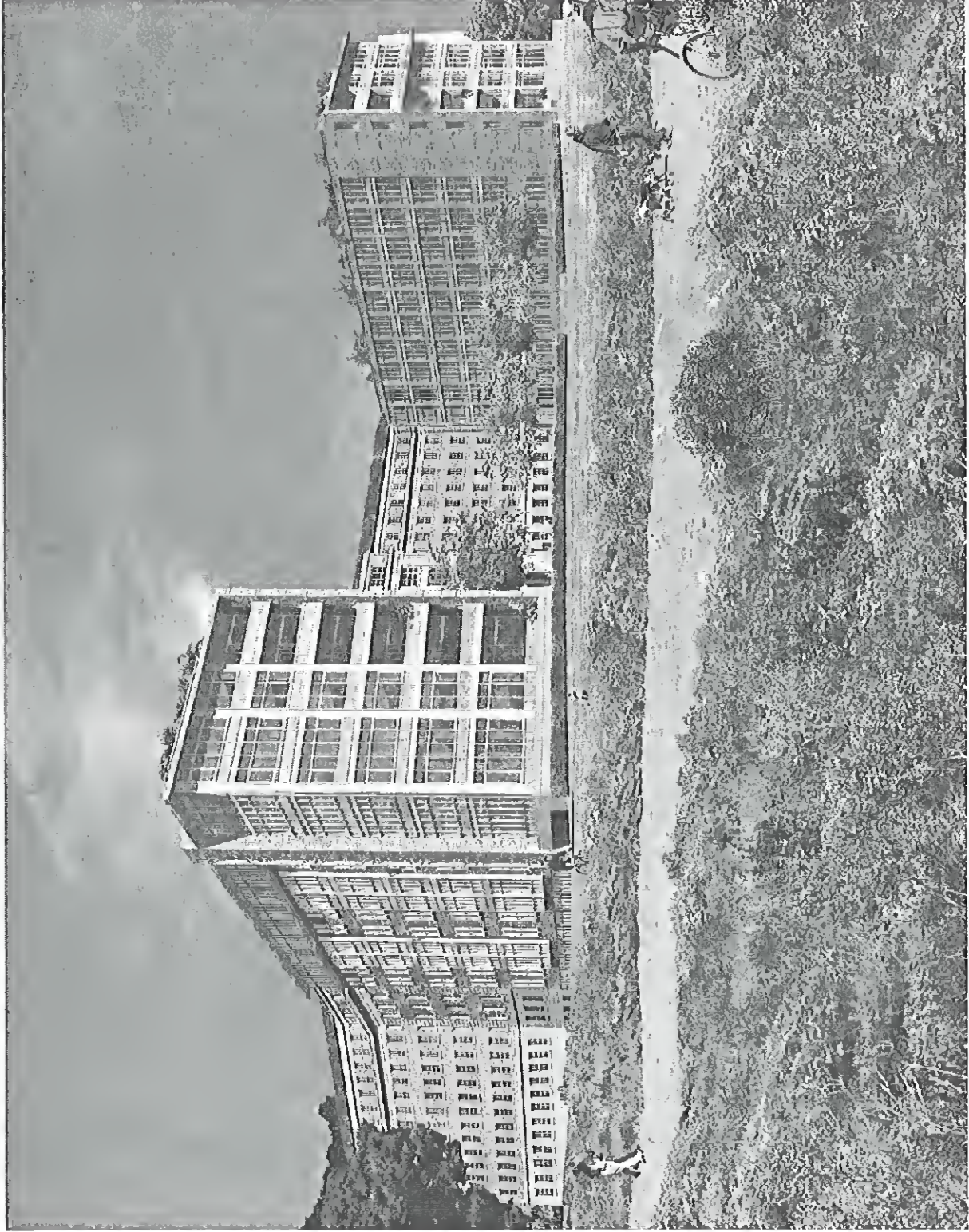


FIGURE 17. BUILDING 1801, ALTERNATIVE 2 (Non-historic Wings Remain at their Current Height)

Source: Presidio Trust, 2003



FIGURE 18. BUILDING 1801, ALTERNATIVE 2 (Non-historic Wings Reduced in Height)

Source: Presidio Trust, 2003

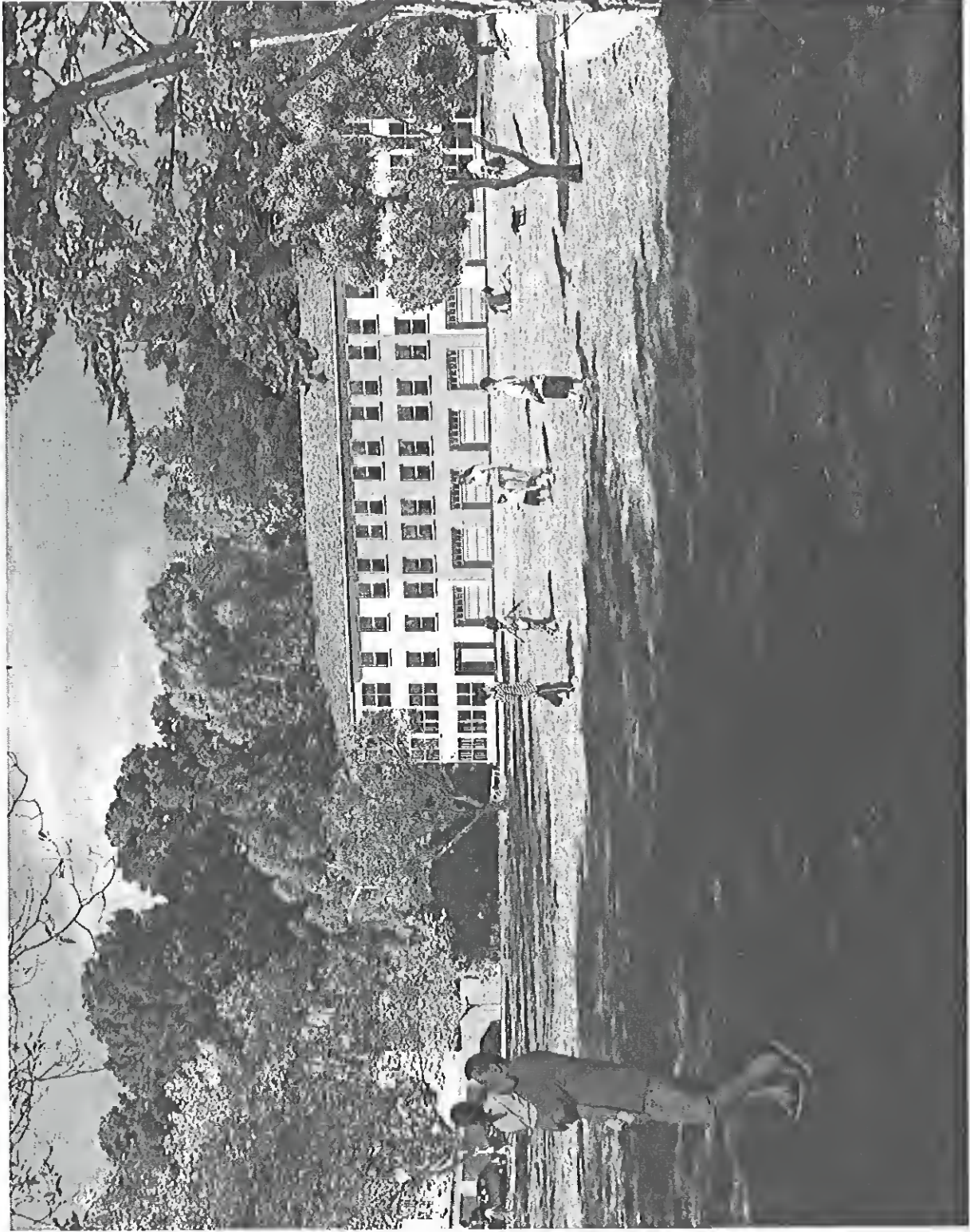


FIGURE 19. VIEW LOOKING NORTH FROM THE CENTRAL GREEN, ALTERNATIVES 2 AND 4

Source: Presidio Trust, 2003



FIGURE 20. BUILDING 1801. ALTERNATIVES 3 AND 4 (Non-historic Wings Removed)

Source: Presidio Trust, 2003

3.7.2.4 Alternative 4: Battery Caulfield Alternative

Similar to Alternative 1, Alternative 4 would rehabilitate and reuse existing buildings, improve the surrounding landscape, and accommodate planned access and open space improvements, positively affecting the visual character of the PHSB district. Chain-link fencing on the lower plateau would be removed, damaged building fabric would be repaired or replaced, parking areas would be re-landscaped, and open space areas would be improved. In addition, Alternative 4 would remove non-historic additions to the PHSB, dramatically changing the building's appearance (see Figure 20).

Unlike Alternative 1, however, Alternative 4 would introduce new residential construction at the north end of the Central Green on the lower plateau (see Figure 19), and would introduce new residential construction at Battery Caulfield (see Figure 21). The new building on the lower plateau would be designed to conform to PTMP planning district guidelines and to be compatible with nearby historic buildings. New construction on the upper plateau would replace heavy equipment, stock-piled soil, and other materials, and would be scaled to be compatible with nearby Building 1450 and nearby non-historic housing. Buildings would step up the site using existing grades and would not exceed two stories in height. The presence of residential buildings at Battery Caulfield would change the visual appearance of the area as well as distant views to and from the upper plateau. Changes to distant views would be mitigated to a large extent by the forested area immediately behind the PHSB, which provides a backdrop for the building and a visual buffer between the lower and upper plateaus.

As in other alternatives, the planned use of 14th Avenue as an entrance to the PHSB district would reemphasize motorists' view toward Building 1808 upon arrival to the site, and the planned construction of a scenic overlook west of the PHSB would emphasize pedestrians' view toward Lobos Valley and the Pacific Ocean.

New activity on the site would mean an increase in lighting, both within buildings and within adjacent parking areas and landscape zones. Exterior lighting would be focused downward, and conformance with PTMP EIS Mitigation Measure NR-7 *Artificial Light* would minimize related impacts.

3.7.2.5 Park Presidio Access Variant

The addition of direct access between the PHSB district and Park Presidio Boulevard under Alternatives 2, 3, or 4 would involve modifications to existing landscaping, roads, and retaining walls in the immediate area but would not substantially change the visual character of the PHSB district. The new, signalized intersection would be used mostly by traffic exiting the district, and motorists would be treated to a view of Mountain Lake to the east. Recreational users within Mountain Lake Park and adjacent areas of the Presidio may be able to see the new traffic signal, but their auditory and visual experience is already largely informed by Park Presidio Boulevard traffic, and this would not change.

3.7.2.6 Cumulative Effects

When considered in combination with planned improvements within the Presidio, all alternatives for the PHSB district would result in positive visual changes due to their emphasis on rehabilitating and reusing buildings on the site and their contribution to landscaping and other site improvements.

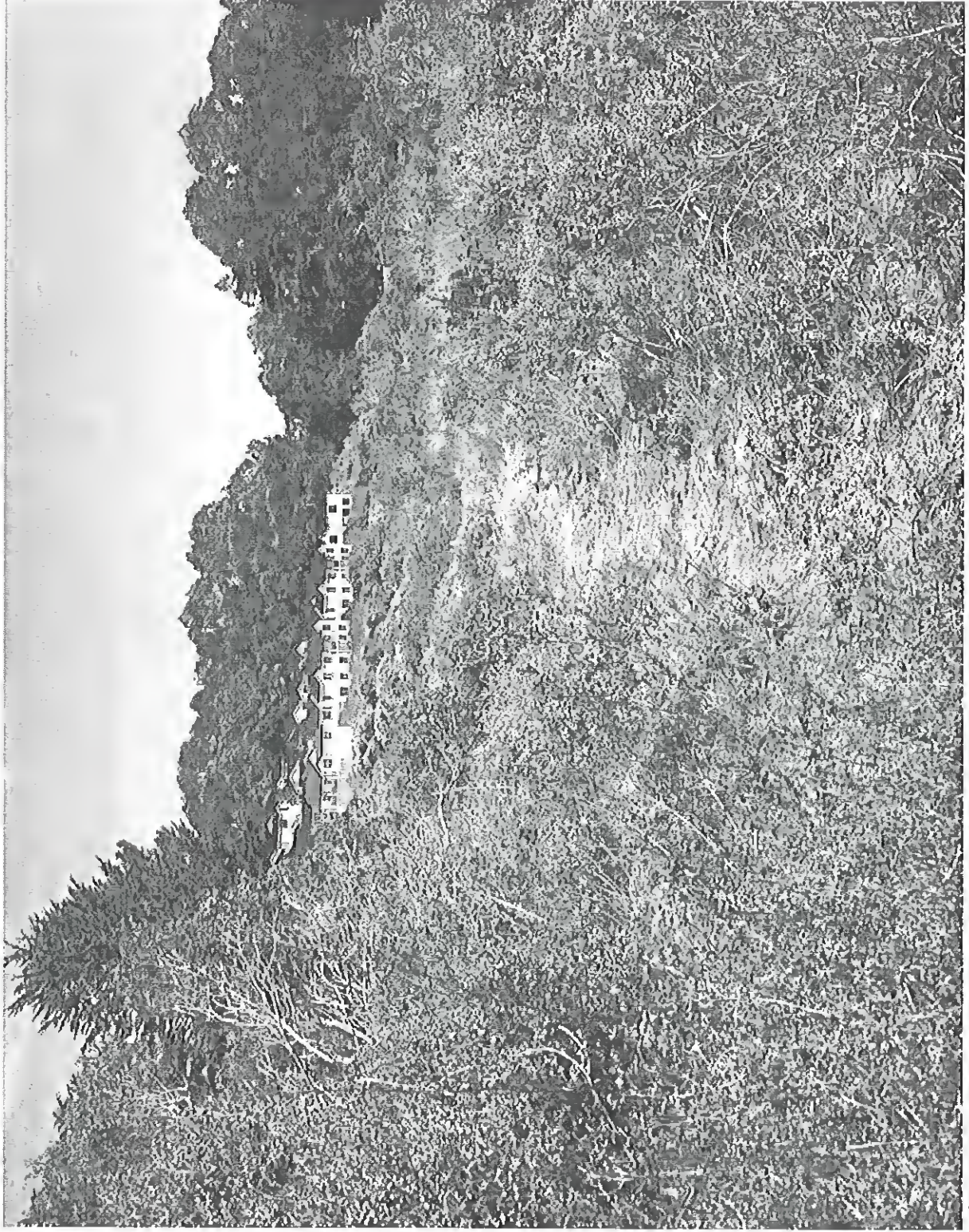


FIGURE 21. VIEW TOWARD BATTERY CAULFIELD, ALTERNATIVE 4

Source: Presidio Trust, 2003

New buildings would be sited and scaled to avoid substantial visual impacts, and increases in lighting would be monitored as agreed to during the PTMP environmental review process. Even Alternative 4, which would add new buildings on the site of a Trust and NPS maintenance yard, would represent a positive visual change when viewed in the context of the PTMP's commitment to remove non-historic housing west of Battery Caulfield Road over time, thereby increasing open space in the park by about 100 acres.

3.7.3 MITIGATION MEASURES

No mitigation measures were identified in the PTMP EIS regarding visual resources. (Mitigation Measure NR-7, listed at the end of the Biological Resources analysis, addresses artificial lighting.) No additional measures have been identified.

3.8 Visitor Use

3.8.1 AFFECTED ENVIRONMENT

The visitor experience, including interpretation/information facilities, interpretation programs, visitor facilities, visitor services, and park-based programs, are described on pages 158 to 161 of the PTMP EIS. This description is incorporated here by reference, and portions relevant to the PHS district are summarized below and expanded upon as necessary.

3.8.1.1 Existing Presidio-wide Visitor Facilities, Services, and Programs

The Presidio as a whole has a number of facilities geared to park visitors, ranging from the NPS visitor center to informational kiosks and wayside signs and including meeting venues, exhibition halls, and single-purpose facilities like the park archives and the archaeology lab. The park also has a number of existing services, events, and programs offered to the visitor by the NPS, the Trust, and Presidio tenants.

Primary visitor destinations within the Presidio include Crissy Field (Area A) and Baker Beach, meeting and exhibition venues such as the Officers' Club and the Golden Gate Club, and recreational facilities such as the Presidio Golf Course, the YMCA, and the trails and bikeways throughout the park. In total, the Trust estimates that the Presidio receives approximately 4.6 million visitors a year, including 2.6 million within the area under Trust jurisdiction (Area B). The 4.6 million visitors represent more than 25 percent of the visitors to the entire Golden Gate National Recreation Area as a whole (including Muir Woods, Fort Point, and the Maritime Museum).¹⁰

3.8.1.2 Existing and Planned Facilities, Services, and Programs in the PHS District

The PHS district currently contains few visitor amenities. The district is used by visitors associated with the tenants in the district (e.g., Arion Press) and visitors who are aware of existing trails in the area.

¹⁰ Trust and NPS estimates cited in the PTMP EIS, Volume 1, page 158.

These trails connect the PHSB district to Mountain Lake on the east and Lobos Valley on the west, and pass through the abundant bird habitat in the Nike Swale area below Battery Caulfield. Areas of both the lower and upper plateaus, including areas around unoccupied buildings and around the Nike Swale, are currently fenced to prevent access. Visitor orientation is provided at an informational kiosk uphill from the 15th Avenue Gate.

In the future, the number of trails and the number of visitor programs and amenities are projected to increase in conformance with the PTMP and the Presidio Trail and Bikeway Master Plan adopted in 2003. Specifically, the existing trails will be extended to provide better connections to adjacent areas of the Presidio, and a trailhead and scenic overlook will be developed west of the PHSB. The trailhead may include a public restroom, as well as informational signs. Other informational and interpretive signs will be provided throughout the PHSB district, and signs, an exhibit, and/or a landscape treatment will commemorate the site of the former Marine Hospital Cemetery behind Building 1801.

3.8.2 ENVIRONMENTAL CONSEQUENCES

The potential impacts of use and development within the Presidio on the visitor experience are assessed on pages 292 to 296 of the PTMP EIS. No impacts are identified within the PHSB district. Overall, the number of park visitors is projected to increase to 7.2 million annually in Area B.

3.8.2.1 Alternative 1: PTMP or No Action Alternative

Rehabilitation and reuse of buildings in the PHSB district would facilitate and not preclude planned improvements related to trails and bikeways, interpretation, and other aspects of the visitor experience, resulting in beneficial impacts. Following the construction period, open space areas on the lower plateau would be opened to the public, as would the lobby of Building 1801.

Interpretive materials would be provided within the lobby of Building 1801 and at key locations throughout the lower plateau, at Battery Caulfield, and at the site of the former Marine Hospital Cemetery. Visitor orientation would be provided via one or more kiosks near park entrances, as well as informational signs at the scenic overlook and trailhead planned for west of the PHSB.

Arion Press would continue to offer its current array of public programs and exhibitions, and new education-related tenants would also offer programs to park visitors and residents. The Trust or the NPS would offer periodic tours or site walks, and stewardship (volunteer) activities would continue at the Nike Swale, adjacent natural areas, and the area known as “Quail Commons” north of Battery Caulfield. Battery Caulfield itself would remain fenced and off-limits to the public for the near term, because it would remain in use as a maintenance yard.

3.8.2.2 Alternative 2: Infill Alternative

Similar to Alternative 1, Alternative 2 would have beneficial effects on the visitor experience because it would rehabilitate and reuse buildings in the PHSB district, and would facilitate and not preclude planned improvements related to trails and bikeways, interpretation, and public programming. Following the

construction period, all open space areas on the lower plateau would be opened to the public, with the exception of areas immediately behind Building 1801. The lobby of Building 1801 would also be open to the public.

Interpretive materials would be provided within the lobby of Building 1801 and at key locations throughout the lower plateau, at Battery Caulfield, and at the site of the former Marine Hospital Cemetery. Visitor orientation would be provided via one or more kiosks near park entrances, as well as informational signs at the scenic overlook and trailhead planned for west of Building 1801.

Arion Press would continue to offer its current array of public programs and exhibitions, and the Trust or the NPS would offer periodic tours or site walks. Stewardship (volunteer) activities would continue at the Nike Swale, adjacent natural areas, and Quail Commons. Battery Caulfield itself would remain fenced and off-limits to the public for the near term, because it would remain in use as a maintenance yard.

3.8.2.3 Alternative 3: No Infill Alternative

Similar to Alternative 1, Alternative 3 would have beneficial effects on the visitor experience because it would rehabilitate and reuse buildings in the PHSB district, and would facilitate and not preclude planned improvements related to trails and bikeways, interpretation, and public programming. Following the construction period, all open space areas on the lower plateau would be opened to the public, with the exception of areas immediately behind Building 1801. The lobby of Building 1801 would also be open to the public.

Interpretive materials would be provided within the lobby of Building 1801 and at key locations throughout the lower plateau, at Battery Caulfield, and at the former Marine Hospital Cemetery. Visitor orientation would be provided via one or more kiosks near park entrances, as well as informational signs at the scenic overlook and trailhead planned for west of Building 1801.

Arion Press would continue to offer its current array of public programs and exhibitions, and the Trust or the NPS would offer periodic tours or site walks. Stewardship (volunteer) activities would continue at the Nike Swale, adjacent natural areas, and Quail Commons. Battery Caulfield itself would remain fenced and off-limits to the public for the near term, because it would remain in use as a maintenance yard.

3.8.2.4 Alternative 4: Battery Caulfield Alternative

Similar to Alternative 1, Alternative 4 would have beneficial effects on the visitor experience because it would rehabilitate and reuse buildings in the PHSB district, and would facilitate and not preclude planned improvements related to trails and bikeways, interpretation, and public programming. Following the construction period, all open space areas on the lower plateau would be opened to the public, with the exception of areas immediately behind Building 1801. The lobby of Building 1801 would also be open to the public.

Interpretive materials would be provided within the lobby of Building 1801 and at key locations throughout the lower plateau, at Battery Caulfield, and at the former Marine Hospital Cemetery. Visitor

orientation would be provided via one or more kiosks near park entrances, as well as informational signs at the scenic overlook and trailhead planned for west of the PHS.

Arion Press would continue to offer its current array of public programs and exhibitions, and the Trust or the NPS would offer periodic tours or site walks. Stewardship (volunteer) activities would continue at the Nike Swale, adjacent natural areas, and Quail Commons. Battery Caulfield itself would become a residential area, with increased public access.

3.8.2.5 Park Presidio Access Variant

Providing direct vehicular access between Park Presidio Boulevard and the PHS site would increase the accessibility of the park, which would be an improvement for park visitors arriving (and departing) by auto. Pedestrians and bicyclists would be prohibited from using the new intersection, but would experience safety improvements at the nearby intersection of Lake Street and Park Presidio Boulevard.

Provision of the new access would necessitate adjustments to the south end of Park Boulevard, a multi-use trail and service road that connects the PHS district to Mountain Lake. Pedestrians would be routed to sidewalks and crosswalks in the vicinity of Building 1808, and bicyclists would be routed to local roads and/or a multi-use trail connection providing east-west access across the lower plateau as shown in the Presidio Trails and Bikeways Master Plan.

3.8.2.6 Cumulative Effects

When combined with improvements anticipated throughout the Presidio as part of the PTMP, the GMPA (for shoreline portions under NPS jurisdiction), and the Presidio Trails and Bikeways Master Plan, the PHS project would improve the visitors' experience. Improvements would include increased access within developed areas of the park, improved trails and bikeways, additional interpretive and orientation materials, and additional opportunities for park programs provided by the Trust, the NPS, and park tenants.

3.8.3 MITIGATION MEASURES

The following mitigation measures are adapted from the PTMP EIS section regarding the visitor experience:

CO-4 *Limitation of Visitor Opportunities* – The Trust will limit visitor opportunities to those that are suited and appropriate to the significant natural, historic, scenic, cultural, and recreational resources of the Presidio. Only those visitor activities that are consistent with the Trust Act and appropriate to the purpose for which the park was established will be allowed. The Trust will welcome tenants to provide activities consistent with these requirements.

CO-5 *Prohibitions on Visitor Use* – The Trust will prohibit visitor uses that impair park resources or values or unreasonably interfere with NPS interpretive activities or other existing, appropriate park uses.

CO-6 Management Controls – The Trust will impose management controls on visitor uses, if necessary, to ensure that the Presidio’s resources are protected. If an ongoing or proposed activity would cause unacceptable impacts to park resources, adjustments would be made to the way the activity is conducted, including placing limitations on the activity, so as to eliminate unacceptable impacts. Any restrictions would be based on professional judgment, law and policy, the best available scientific study or research, appropriate environmental review, and other available data. As visitor use changes over time, the Trust will decide if management actions are needed to keep use at acceptable and sustainable levels.

CO-7 Monitoring of Visitor Levels – The Trust will monitor visitation levels to ensure that park uses do not unacceptably affect Presidio resources, including visitor experience. Visitor carrying capacities for managing visitor use will be identified if necessary.

NR 14 Visitor Management – The Trust will monitor visitor numbers and use in the vicinity of the wetlands on the upper plateau (Nike Swale area) and will take steps to reduce or eliminate related impacts as necessary. Informational leaflets, signs, and regulatory measures will be employed as necessary.

3.9 Utilities and Services

3.9.1 AFFECTED ENVIRONMENT

The Presidio’s infrastructure and utilities are described on pages 184 to 192 of the PTMP EIS. Public safety-related services are described on pages 166 and 167. These descriptions are summarized and expanded upon below, where relevant to the PHSB district.

3.9.1.1 Water Supply and Demand

The Trust operates a facility that treats water from nearby Lobos Creek to provide potable water to the park under permit from the California Department of Health Services.¹¹ Supplemental water is purchased from the City and County of San Francisco (CCSF) as needed. Similar to Presidio supplies, the amount of CCSF water used varies significantly based on the type of water year. Between 1999 and 2003, CCSF provided between 6 and 18 percent of the total water consumed at the park, and the remainder was provided by Lobos Creek. During this period, use of CCSF water ranged from 0 gallons per day in the winter and spring to 1 million gallons per day (mgd) at the peak of the dry season.

The San Francisco Public Utilities Commission (SFPUC), the CCSF department that provides water to San Francisco and surrounding communities, estimates that the current total demand for water from its system is approximately 90 mgd. In its Urban Water Management Plan, the SFPUC identifies the Presidio as a “retail customer,” with an estimated daily demand of 1 mgd through the year 2020 (SFPUC 2001). Because the Presidio is a retail customer, the purchase and use of water from the SFPUC is

¹¹ Provision 11 of the permit stipulates that, to help protect water quality within the Lobos Creek Valley, the use of reclaimed water within the PHSB district is prohibited (DHS 1997).

subject to its water shortage regulations, including mandatory water rationing programs and rate structures adopted during drought conditions.

The Trust is committed to reducing the demand for off-site water resources by conserving water and by implementing water recycling in northern and eastern sections of the park (see PTMP page 55). Phase one of the Trust's water recycling plant, which is currently under construction, will provide approximately 200,000 gallons per day (gpd) for irrigation purposes, reducing dependence on Lobos Creek and CCSF water.

The PHSB site receives water from the Trust system from the north and the CCSF system to the south. Presently, one of the three CCSF lines, a 10-inch line entering the site from 15th Avenue, serves as a fire connection with 70 pounds per square inch (psi) of static hydrant pressure. The CCSF water system is in fair to good condition.

Based on water demand estimates developed for the PTMP EIS, current average daily water use within the PHSB district is 6,800 gallons. The PTMP EIS estimates that the future Presidio-wide average daily demand for water would be 0.72 million gallons.

3.9.1.2 Wastewater Treatment and Disposal

All of the on-site sanitary sewer mains from the PHSB district run south to the CCSF combined sewer system in 14th Avenue and then to Lake Street, which routes wastewater to the CCSF's Oceanside Water Pollution Control Plant (OSP), the City's newest treatment plant (and one of the few plants in the United States built largely underground). OSP meets all federal and state discharge standards. Approximately 95 percent of the pollutants are removed from the wastewater stream before discharge into the Pacific Ocean through the 4.5-mile Southwest Ocean Outfall. During peak wet weather, OSP treats 60 mgd from the City's west side. In 2000, the OSP treated an average of approximately 17 mgd.

Given their age, the joints of the sewer mains within the PHSB district may allow inflow and infiltration, which could increase flows to OSP during the wet season.

Based on estimates developed in the PTMP EIS, current average daily wastewater flows within the PHSB district are 6,000 gpd. The PTMP EIS estimates that the Presidio is expected to generate 0.65 mgd annually at full occupancy.

3.9.1.3 Storm Drainage

The on-site storm water collection system drains to the 17th Avenue system, which connects to the Richmond Transport system, part of the City's combined sewer system. Most of the piping is in good condition; however, several sections are crushed and in need of repair. The district does not experience flooding problems.

3.9.1.4 Solid Waste

The Trust handles solid waste disposal through contracts with the Golden Gate Disposal and Recycling Company, a subsidiary of Norcal Waste Systems, Inc. Currently, the Presidio generates approximately

2,250 tons of waste per year. Discards are delivered to a transfer station run by Sanitary Fill Company, which is also owned by Norcal Waste Systems, Inc. Close to 90 percent of the waste is transferred from Norcal Waste System Inc.'s transfer station to USA Waste's Altamont Landfill, located in Alameda County 62 miles southeast of San Francisco. The balance of the waste ends up in 15 to 20 other landfills in the region. At the current rate of disposal, the Altamont Landfill capacity is sufficient through 2008. However, if the region's diversion rate increases to 50 percent by 2005, this will extend the capacity of the landfill until 2011.

Using estimates developed by Golden Gate Disposal and the Trust in coordination with the City, Presidio residents are expected to generate 3,400 tons per year at full occupancy.¹² To minimize the park's impact on the solid waste stream, the Trust has initiated a comprehensive waste reduction and recycling program, which includes recycling, outreach and education, and in-house salvage, compost, and regeneration programs. The program received a WasteWise Program Champion Award from the EPA. According to the EPA and Golden Gate Disposal, in 2002 the Presidio diverted over 67 percent (1,500 tons of material, including organics) from the waste stream.

3.9.1.5 Gas System

Pacific Gas and Electric Company (PG&E) owns and maintains the gas infrastructure at the Presidio, including the PHS district. An existing high-pressure gas line extends from 14th Avenue into the district and fires a boiler system at Building 1802. Based on estimates developed for the PTMP EIS, Presidio-wide development under the PTMP would generate demand for up to 2.30 million therms of natural gas annually.

3.9.1.6 Electrical System

PG&E provides high-voltage electric service to the district. Power comes through the 14th Avenue Gate and feeds Buildings 1801 and 1802, where it is "stepped down" to a usable voltage and delivered to other buildings within the district. A 12,000-volt line at 14th Avenue and Lake Street was recently installed.

In the near future, PG&E will be replacing overhead electric facilities with underground lines on 14th and 15th Avenues and other streets within the Mid-Lake District as part of its Rule 20 Undergrounding Program. The costs for undergrounding will be recovered through electric rates after the project is completed (expected by the fourth quarter 2004).

Based on estimates developed for the PTMP EIS, up to 50.24 million kilowatt-hours of electricity would be consumed at the Presidio annually at full occupancy.

3.9.1.7 Fire Protection and Emergency Response

Presently, the Presidio Fire Department provides fire prevention and protection, fire suppression, rescue, and emergency medical services to the Presidio through an interagency agreement with the NPS. The Presidio Fire Department maintains two fire stations within the GGNRA, one located on the Main Post

¹² Based on the average amount of garbage generated in a single-family home in San Francisco: 35 pounds per week or approximately 1,800 pounds per year.

and the other in the Marin Headlands. Fire Station 51 (Main Post) houses one engine company, one truck company, one paramedic (advanced life support or ALS) ambulance, and one command vehicle. Each day, between seven and ten firefighters are on duty, with an Assistant Chief on duty to supervise operations and serve as the Incident Commander. In 2003, the Presidio Fire Department responded to over 1,100 calls for service. Calls for service within Area B numbered 660. Of this number, 90 percent of the calls for service were for emergency medical services.

The National Fire Protection Association (NFPA) establishes the standards, requirements and recommended practices for fire departments in the United States. The NFPA also establishes the Fire Codes and the Life Safety Codes used by the NPS and the Presidio Fire Department. NFPA 1710 establishes the minimum number of on-duty personnel, the minimum number of fire apparatus, and the minimum response times to areas within the department's jurisdiction. This standard provides guidance to the Presidio Fire Department and helps shape the department's planning of present and future deployment of firefighting forces, equipment and emergency resources.

NFPA 1710 establishes a minimum four-minute response time for all calls for service that involve fire and emergency medical services. The standard requires fire departments to meet the four-minute response time at least 90 percent of the time. In 2003, the Presidio Fire Department reached the four-minute response benchmark 74 percent of the time for fire-related and emergency medical services calls for service generated at the Presidio. This response rate is due greatly to the large response area that is covered by one fire station. Average response times, which take into account travel distance, road conditions, and traffic conditions, to the Baker Beach Apartments area and the PHS district are 6.3 minutes. These two areas of the Presidio have been historically deficient in the required response times and have been managed using risk management practices. Over the past four years, the increase in population in the Baker Beach Apartments area has resulted in an increase in calls for service.

To provide fire suppression and rescue services to incidents that exceed the capability of the Presidio Fire Department, the department has entered into a mutual aid agreement with the San Francisco Fire Department (SFFD) whereby assistance will be provided by SFFD personnel on an "as available" basis at the request of the Presidio Fire Department (NPS 2004b).

3.9.1.8 Law Enforcement

Law enforcement services at the Presidio are provided by the U.S. Park Police (USPP) San Francisco Field Office (SFFO) pursuant to an interagency agreement with the Trust, which reimburses the NPS for its service costs. At present, the USPP has an authorized strength of 83 sworn law enforcement positions, and 33 of these authorized positions are dedicated to the Presidio. USPP law enforcement functions include vehicle patrol, motorcycle patrol, foot patrol, horse-mounted patrol, bicycle and trail bike patrol, search and rescue, emergency medical service support, traffic safety, criminal investigations, narcotics enforcement, dispatch, emergency communications, and administrative support. Emergency calls at the Presidio have an average response time of less than three minutes, while the non-emergency response time is less than ten minutes. Area B of the Presidio is divided into two beats patrolled 24 hours a day. Each patrol beat typically has two patrol cars with a single officer. Currently there is no police station

available 24 hours a day, only a dispatch center that can be called via 911 to report incidents. To augment USPP in special or unusual circumstances, the USPP has entered into a mutual aid agreement with the San Francisco Police Department (SFPD) whereby assistance will be provided by SFPD law enforcement personnel at the request of the USPP.

Today, most of the building square footage within the PHS district is unoccupied. Building 1801 is entirely vacant and the lack of occupancy has made it impossible to secure the building from vandalism and theft, which has led to a gradual acceleration of deterioration within the building.

3.9.2 ENVIRONMENTAL CONSEQUENCES

The demand for utilities and services Presidio-wide is assessed on pages 298 to 301 and pages 328 to 352 of the PTMP EIS. The discussion is incorporated here by reference and supplemented by analysis of issues specific to the PHS project alternatives under consideration. A summary of annual utility demands based primarily on demand assumptions by land use from the PTMP EIS is provided in Table 19.

Table 19. Annual Utility Demands

UTILITY	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4
Water Consumption (gpd)	71,000	69,000	55,000	43,000
Wastewater Treatment and Disposal (gpd)	55,000	53,000	40,000	30,000
Solid Waste Generation (tons)				
Construction	4,950	6,800	12,000	11,580
Operation (annual)	740 ^a	820	540	450
Natural Gas Usage (thousand therms)	1.64	1.64	1.13	1.48
Electrical Demand (million kWh)	2.61	1.62	1.24	1.47

Source: Presidio Trust 2002b; California Integrated Waste Management Board 2004.

^a Based on a generation rate of 0.0013 tons/sf/yr for educational use.

gpd = gallons per day.

kWh = kilowatt-hours.

3.9.2.1 Alternative 1: PTMP or No Action Alternative

Water Supply and Demand – The proposed use of the PHS district under this alternative is taken into account in the PTMP EIS water demand calculations, and therefore projected water supply would be sufficient for expected needs. Using water demand estimates developed for the PTMP EIS, the various

land uses associated with this alternative would demand an average of approximately 71,000 gpd annually, an increase of 64,200 gpd over existing conditions. This average demand represents approximately 10 percent of the projected water demand of the Presidio under the PTMP. Water would be fed from either the Trust or the CCSF system.¹³ The physical condition and capacity of the feeds from both systems are generally adequate to serve the project; however, some upgrades and new backflow prevention devices, fire laterals, and meters would be required.

As required by PTMP EIS Mitigation Measure UT-1 *Demand Management Best Management Practices*, the alternative would use water efficiently and responsibly. The water system would be designed to maximally conserve water. Water-efficient devices would be installed in all structures, and efficient methods would be used for outdoor irrigation.

Wastewater Treatment and Disposal—Wastewater generation was projected in the PTMP EIS by applying a 90 percent factor to the domestic water use estimates (non-irrigation demand). The result was compared to current levels to determine impacts on the City's sanitary sewer system, which treats wastewater from the Presidio. Based on wastewater projections in the PTMP EIS, proposed uses at full occupancy in the PHSB district under this alternative would generate 55,000 gpd of wastewater annually. Wastewater generated from the PHSB district would be routed to the CCSF's Oceanside Water Pollution Control Plant, which has sufficient capacity and can absorb wet weather flows better than the Southeast Water Pollution Control Plant.

Existing sewer lines are adequately sized to handle increased flows from development under this alternative. PTMP EIS Mitigation Measure UT-4 *Reduction of Onsite Wastewater Generation* acknowledges that water conservation practices required by PTMP EIS Mitigation Measure UT-1 to minimize water usage within the district would reduce wastewater generation and flows to the CCSF system.

Storm Drainage—The existing storm sewer system has sufficient capacity and would be generally functional to meet the needs of this alternative. Storm water would continue to be directed to the CCSF combined sewer system (and not to Lobos Creek), and storm drains along Wyman Avenue would be re-routed to the CCSF system (instead of Mountain Lake). Upgrading inlets in key pedestrian areas, limited slip-lining and/or replacement of damaged piping, and new inlets and piping from new parking areas would be required. Infrastructure improvements would be installed prior to new construction to minimize storm water runoff and comply with existing water quality standards and regulatory requirements (Mitigation Measure UT-6 *Storm Water Drainage System Upgrades*). In addition, designs or measures would be implemented to minimize impervious surfaces in order to reduce storm water runoff volumes and improve water quality, including using on-site vegetation and landscaping as a filtration and retention system to the extent feasible. Grass, sand, and other porous surfaces would be placed around non-porous surfaces such as asphalt to limit storm water flows (Mitigation Measure UT-7 *Storm Water Reduction*).

¹³ Should CCSF supply all water to the PHSB district, water purchases from the CCSF on a Presidio-wide basis would increase from 108,000 gpd as projected in the PTMP EIS to a maximum of 152,000 gpd (under Alternative 1). The increase is still well below the CCSF estimated daily demand of 1 mgd for the Presidio in the SFPUC Urban Water Management Plan. Increased reliance on the CCSF for potable water would reduce demands on Lobos Creek.

During construction activities, best management practices would be used to prevent erosion, surface runoff, and siltation of downstream water bodies (Mitigation Measure NR-15 *Best Management Practices*).

Solid Waste – The impacts of demolition, construction, and rehabilitation activities in the PHSB district on the regional waste stream are analyzed in the PTMP EIS. Based on solid waste estimates developed for the PTMP EIS, building rehabilitation within the PHSB district under this alternative would result in the disposal of up to 4,950 tons of debris. Impacts on regional landfills would be substantially reduced by adaptively reusing all existing buildings (minimizing materials use and eliminating almost all demolition waste) and by recycling waste generated during construction to the maximum extent feasible as required by PTMP EIS Mitigation Measure UT-8 (*Waste Diversion*). Waste recycling would include developing and implementing a construction and demolition debris management plan (see Appendix C) with the aim to divert up to 75 to 80 percent of construction waste from landfills as demonstrated by the Letterman Digital Arts project.

During operation, this alternative would generate roughly 740 tons of waste per year. Solid waste would be reduced by as much as two-thirds through efficient resource use, recycling and reuse, diverting organic material from waste, and purchasing products composed of recycled materials.¹⁴

Gas System – The PTMP EIS takes into account the natural gas demand of this alternative. Based on the natural gas use projections of the proposed use (by square foot) within the PTMP EIS, this alternative would consume 1.64 thousand therms of natural gas annually.¹⁵ Existing services are adequately sized for the proposed development at the project site, although some upgrades to the infrastructure may be required. Any improvement in the existing services to the site would be the responsibility of PG&E. The development would adopt the principles of sustainable design and technology, and conservation measures would be implemented to minimize natural gas usage (Mitigation Measure UT-13 *Energy Conservation*).

Electrical System – The potential impacts of this alternative on electrical use were analyzed in the PTMP EIS. The square footage for proposed land uses under this alternative was used to project the electrical use and demand. Based on the projections by land use in the PTMP EIS, up to 2.61 million kilowatt-hours (kWh) of electricity would be consumed at the PHSB district annually. The Trust's private development partner(s) would work directly with the Trust (or PG&E)¹⁶ to upgrade the electrical system serving the PHSB district for safety and efficiency, including repair and rehabilitation of old cables and, where possible, undergrounding of overhead lines. Energy conservation practices would be employed within the PHSB district to maximize energy efficiency.

Fire Protection and Emergency Response – Without adequate structural fire protection and suppression, a structural fire within the PHSB district could cause significant damage to property and

¹⁴ Since the PTMP, the Presidio's diversion rate of 65 percent (2002-2003 average) has exceeded the PTMP goal of at least 50 percent (email correspondence, Debby Dunn, Marketing and Community Relations, Golden Gate Disposal, December 8, 2003).

¹⁵ Based upon a gas index of 0.41 therms/square foot (PTMP EIS, page 348).

¹⁶ While the Trust operates and maintains the electrical distribution system at the Presidio, it is a bundled service customer of PG&E. Therefore, the development team may choose service directly from PG&E.

result in deaths and injuries. Fire prevention, protection, and suppression would be primary considerations in the design, construction, rehabilitation, maintenance, and operation of all PHSF facilities. Prevention priorities would focus on occupied structures and historic resources, with emphasis placed evenly on code compliance, early warning detection, suppression systems, and employee training and awareness. Fire prevention at the district would occur through code-compliant new construction, upgrading of existing structures, and properly installed and maintained detection and suppression systems. The best available technology would be used to detect and provide early warning of fires and to prevent and suppress structural fires. Structural fire deficiencies would be addressed and corrected, including removing and replacing the existing fire escapes within Building 1801 with code-compliant exit stairs within the building, and installing automatic wet pipe sprinkler systems. The water supply and delivery system would be designed and maintained to provide sufficient flows to operate fire sprinkler systems and fire hydrants.

Prior to building rehabilitation, construction documents and shop drawings would be submitted, reviewed, and approved by Presidio Fire Department fire inspectors. Construction documents would include all fire prevention requirements for the proposed uses, and the shop drawings would be required to comply with applicable codes and standards. Buildings and structures would be equipped, maintained, and operated in accordance with applicable codes and standards as to provide a reasonable level of life safety, public welfare, and property protection from actual and potential hazards created by fire. The preservation of historic buildings would be effectively integrated with fire management through the use of “minimum impact” techniques. The Presidio Fire Department fire inspectors would inspect construction in progress and provide life safety inspection of subsequent occupancy and public education to reduce fire loss.

In the event of a structural fire at the PHSF district, effective management of the safe and orderly evacuation of building residents would require an adequate number of Presidio Fire Department responders. The existing first alarm response by the Presidio Fire Department would consist of two engines, two paramedic (ALS) ambulances, one truck company, and one chief officer. This level of response would provide between 10 and 13 firefighters to the scene to initiate search and rescue operations, assist in evacuation, and conduct fire suppression operations. The Presidio Fire Department has indicated that additional equipment and staff located in a temporary or permanent location in the southern portion of the Presidio would be required to meet fire flow and provide an adequate number of personnel to conduct an initial attack operation safely within the NFPA standard. According to the Presidio Fire Department, additional equipment and staff would also be required in a suitable location in the southern portion of the Presidio to ensure the availability of the required four-minute response to emergency medical calls for service (see Mitigation Measure CO-12.)

Law Enforcement – The increase in resident and employee population in the PHSF district would potentially increase the number of calls for police service from occupants while reducing calls related to vagrancy and vandalism. As required by PTMP EIS Mitigation Measure CO-12 *Expansion of Public Safety Services*, as calls for police service increase, the USPP would make appropriate increases in staff, equipment, and facilities and scale up its operations as necessary to ensure that law enforcement services remain at adequate levels.

3.9.2.2 Alternative 2: Infill Alternative

Water Supply and Demand – Water demand under this alternative would be less than that taken into account in the PTMP EIS water demand calculations, and therefore projected water supply would be sufficient for expected needs. The alternative would demand approximately 69,000 gpd annually, compared to 71,000 gpd estimated in the PTMP EIS. Use of CCSF water as an alternative source would reduce the Presidio's dependence on Lobos Creek for water supply (see footnote 13). The physical condition and capacity of feeds from both the Presidio and CCSF systems are generally adequate to serve the project; however, some upgrades and new backflow prevention devices, fire laterals, and meters would be required.

The alternative would use water efficiently and responsibly. The water system would be designed to maximally conserve water. Water-efficient devices would be installed in all structures, and efficient methods would be used for outdoor irrigation.

Wastewater Treatment and Disposal – New uses at full occupancy under this alternative would generate 53,000 gpd of wastewater annually, or 2,000 gpd less than proposed uses under the PTMP. Existing sewer lines are adequately sized to handle increased flows from development under this alternative. Water conservation practices to minimize water usage within the PHS district would reduce wastewater generation and flows.

Storm Drainage – Impacts on the storm sewer system under Alternative 2 would be similar to those of Alternative 1. Some infrastructure improvements would be required to minimize storm water runoff and comply with existing water quality standards and regulatory requirements. Designs or measures would be implemented to limit or eliminate impervious surfaces in order to reduce storm water runoff volumes and improve water quality.

Solid Waste – Under this alternative, almost all of the existing buildings (no less than 88 percent) would be adaptively reused, which would limit demolition and new construction waste. Demolition of the front connector, two-story rear additions and (possibly) the two top levels of the non-historic wings of Building 1801, replacement construction, and rehabilitation of historic buildings would result in the disposal of up to 6,800 tons of debris. Cost-effective, environmentally protective alternatives to disposal of demolition debris would be implemented to minimize impacts on the regional waste stream. These measures would include developing and implementing a construction and demolition debris management plan (see Appendix C) with the aim to divert up to 75 to 80 percent of construction waste from landfills.

During operation, this alternative would generate up to 820 tons of solid waste per year. Solid waste would be reduced by as much as two-thirds through efficient resource use, recycling and reuse, diverting organic material from waste, and purchasing products composed of recycled materials.

Gas System – This alternative would consume roughly the same amount of natural gas as Alternative 1 (1.64 thousand therms annually). While existing services are adequately sized for the proposed development, some upgrades to the infrastructure may be required. The development would adopt the

principles of sustainable design and technology, and conservation measures would be implemented to minimize natural gas usage.

Electrical System – This alternative would consume 1.62 million kWh of electricity at the district annually compared to 2.61 million kWh under the PTMP (Alternative 1). Similar to Alternative 1, the electrical system serving the district would require upgrading for safety and efficiency, including repair and rehabilitation of old cables and, where possible, undergrounding of overhead lines. A number of energy conservation practices would be employed within the district to maximize energy efficiency.

Fire Protection and Emergency Response – Similar to Alternative 1, fire prevention under this alternative would occur through code-compliant new construction, upgrading of existing structures, and properly installed and maintained detection and suppression systems. The best available technology would be used to detect and provide early warning of fires and to prevent and suppress structural fires. Structural fire deficiencies would be addressed and corrected, including removing and replacing the existing fire escapes within Building 1801 with code-compliant exit stairs within the building, and installing automatic wet pipe sprinkler systems. The water supply and delivery system would be designed and maintained to provide sufficient flows to operate fire sprinkler systems and fire hydrants. For new construction, modification, and rehabilitation, construction documents and shop drawings would be submitted, reviewed, and approved by Presidio Fire Department fire inspectors prior to the start of work. All new and existing buildings and structures would be constructed, arranged, equipped, maintained, and operated in accordance with applicable codes and standards. The Presidio Fire Department fire inspectors would inspect construction in progress and provide life safety inspection of subsequent occupancy. As required by PTMP EIS Mitigation Measure CO-12 *Expansion of Public Safety Services*, firefighting staff, equipment, and/or facilities would be increased to provide the required levels of fire protection and emergency medical response to the PHS district.

Law Enforcement – Similar to Alternative 1, this alternative would potentially increase the number of calls for police service while reducing the number of calls related to vagrancy and vandalism. The USPP would make appropriate increases in staff, equipment, and facilities and scale up its operations as necessary to ensure that law enforcement services remain at adequate levels.

3.9.2.3 Alternative 3: No Infill Alternative

Water Supply and Demand – Water demand under this alternative would be 55,000 gpd annually, 16,000 gpd less than that taken into account in the PTMP EIS water demand calculations. Therefore, projected water supply would be sufficient for expected needs. Should CCSF water be used as an alternative source, the Presidio's dependence on Lobos Creek for water supply would be reduced (see footnote 13). The physical condition and capacity of the feeds from both the Presidio and CCSF systems are generally adequate to serve the project; however, some upgrades and new backflow prevention devices, fire laterals, and meters would be required.

Water would be used efficiently and responsibly. The water system would be designed to maximally conserve water, water-efficient devices would be installed in all structures, and efficient methods would be used for outdoor irrigation.

Wastewater Treatment and Disposal – New uses at full occupancy under this alternative would generate 40,000 gpd annually, or 15,000 gpd less than proposed uses under the PTMP (Alternative 1). Existing sewer lines are adequately sized to handle increased flows from development under this alternative. Water conservation practices to minimize water usage within the PHSB district would reduce wastewater generation and flows.

Storm Drainage – Impacts on the storm sewer system under Alternative 3 would be similar to those of Alternative 1. Some infrastructure improvements would be required to minimize storm water runoff and comply with existing water quality standards and regulatory requirements. Designs or measures would be implemented to limit or eliminate impervious surfaces in order to reduce storm water runoff volumes and improve water quality.

Solid Waste – Under this alternative, almost all of the existing buildings (no less than 88 percent) would be adaptively reused, and there would be no new construction waste. Demolition of the non-historic additions of Building 1801 and rehabilitation of historic buildings would result in the disposal of approximately 12,000 tons of debris. Cost-effective, environmentally protective alternatives to disposal of demolition debris would be implemented to minimize impacts on the regional waste stream, including developing and implementing a construction and demolition debris management plan (see Appendix C).

During operation, this alternative would generate roughly 540 tons of solid waste per year. Solid waste would be reduced by as much as two-thirds through efficient resource use, recycling and reuse, diverting organic material from waste, and purchasing products composed of recycled materials.

Gas System – This alternative would consume roughly two-thirds the amount of natural gas required used under Alternative 1 (1.13 thousand therms compared to 1.64 thousand therms annually under the PTMP). Existing services are adequately sized for the proposed development but some upgrades may be required. The development would adopt the principles of sustainable design and technology, and conservation measures would be implemented to minimize natural gas usage.

Electrical System – This alternative would consume less than half the electricity that would be used under Alternative 1 (1.24 million kWh of electricity at the district annually compared to 2.61 million kWh under the PTMP). Similar to Alternative 1, the electrical system serving the district would require upgrading for safety and efficiency, including repair and rehabilitation of old cables and, where possible, undergrounding of overhead lines. Energy conservation practices would be employed within the district to maximize energy efficiency.

Fire Protection and Emergency Response – Similar to Alternative 1, fire prevention under this alternative would occur through code-compliant new construction, upgrading of existing structures, and properly installed and maintained detection and suppression systems. The best available technology

would be used to detect and provide early warning of fires and to prevent and suppress structural fires. Structural fire deficiencies would be addressed and corrected, including removing and replacing the existing fire escapes within Building 1801 with code-compliant exit stairs within the building, and installing automatic wet pipe sprinkler systems. The water supply and delivery system would be designed and maintained to provide sufficient flows to operate fire sprinkler systems and fire hydrants. As required by PTMP EIS Mitigation Measure CO-12 *Expansion of Public Safety Services*, firefighting staff, equipment, and/or facilities would be increased to provide the required levels of fire protection and emergency medical response to the PHSB district.

Law Enforcement – As with Alternative 1, the increase in resident and employee population at the PHSB district would potentially increase the number of calls for police service from occupants and reduce the calls related to vagrancy and vandalism. USPP law enforcement services would be reviewed and expanded as necessary to ensure that adequate services are maintained.

3.9.2.4 Alternative 4: Battery Caulfield Alternative

This alternative would require extending utility services to Battery Caulfield, probably along Battery Caulfield Road.

Water Supply and Demand – Water demand under this alternative would be 43,000 gpd annually, 28,000 gpd less than that estimated for the PHSB district under the PTMP. Therefore, projected water supply would be sufficient for expected needs. Should CCSF water be used as an alternative source, the Presidio's dependence on Lobos Creek for water supply would be reduced (see footnote 13). The physical condition and capacity of the feeds from the Presidio and CCSF systems are generally adequate to serve the project; however, some upgrades and new backflow prevention devices, fire laterals, and meters would be required. While flow and pressure requirements would be sufficient within the PHSB complex, a booster pump may be needed to meet fire flows within Battery Caulfield.

Water would be used efficiently and responsibly. The water system would be designed to maximally conserve water, water-efficient devices would be installed in all structures, and efficient methods would be used for outdoor irrigation.

Wastewater Treatment and Disposal – New uses at full occupancy under this alternative would generate 30,000 gpd of wastewater annually, or 45 percent less than proposed uses for the PHSB district under the PTMP. Existing sewer lines are adequately sized to handle increased flows from development under this alternative. Water conservation practices to minimize water usage within the district would reduce wastewater generation and flows.

Storm Drainage – Impacts on the storm sewer system under Alternative 4 would be similar to those of Alternative 1. Some infrastructure improvements would be required to minimize storm water runoff and comply with existing water quality standards and regulatory requirements. Designs or measures would be implemented to limit or eliminate impervious surfaces in order to reduce storm water runoff volumes and improve water quality (see also the discussion of hydrology and associated mitigation in Section 3.11.2.4).

Solid Waste – This alternative would generate the most solid waste during construction due to the amount of demolition and new construction. Demolition of the non-historic wings of Building 1801, replacement construction, and rehabilitation of historic buildings would result in the disposal of up to 11,580 tons of debris. Cost-effective, environmentally protective alternatives to disposal of demolition debris would be implemented to minimize impacts on the regional waste stream, including developing and implementing a construction and demolition debris management plan (see Appendix C).

During operation, this alternative would generate roughly 405 tons of solid waste per year, of which as much as two-thirds would be diverted from regional landfills.

Gas System – This alternative would consume approximately 10 percent less natural gas than Alternative 1 (1.48 thousand therms compared to 1.64 thousand therms annually under the PTMP). Existing services are adequately sized for the proposed development but some upgrades may be required. The development would adopt the principles of sustainable design and technology, and conservation measures would be implemented to minimize natural gas usage.

Electrical System – This alternative would consume 1.47 million kWh of electricity at the district annually compared to 2.61 million kWh under Alternative 1. Similar to Alternative 1, the electrical system serving the PHSB district would require upgrading for safety and efficiency, including repair and rehabilitation of old cables and, where possible, undergrounding of overhead lines. A number of energy conservation practices would be employed within the district to maximize energy efficiency.

Fire Protection and Emergency Response – Impacts on structural fire protection at the PHSB complex would be similar to those of Alternative 1. However, new construction at Battery Caulfield would require that the loop road be designed and constructed to ensure fire and emergency vehicle access. Following occupancy of the project, reduction of fire loss would be accomplished through an ongoing fire prevention inspection program and public education. However, unlike Alternatives 1, 2, and 3, occupants of senior housing (Building 1801) or assisted living units (Building 1808) under this alternative who may rely upon skilled nursing or continuing care may not be capable of self-rescue in the event of a fire. This would result in an increased need for available Presidio Fire Department responders to assist with occupant evacuation, in addition to initiating search and rescue operations and conducting fire suppression operations. As required by PTMP EIS Mitigation Measure CO-12 *Expansion of Public Safety Services*, firefighting staff, equipment, and/or facilities would be increased to provide additional coverage to the PHSB district as needed. Also, unlike Alternatives 1, 2, and 3, in which the vast majority of building occupants would be ambulatory, this alternative would include an older population and an assisted living component, increasing emergency medical calls for service and placing an increased response load on the existing paramedic (ALS) ambulance staffed at the Presidio. The Presidio Fire Department has indicated that additional equipment and staff would be required in a suitable location in the southern portion of the Presidio to ensure the availability of the required four-minute response to emergency medical calls for service and to ensure paramedic (ALS) level care is available.

Law Enforcement – As with Alternative 1, the number of calls for police service from occupants would potentially increase under this alternative while the number of calls related to vagrancy and vandalism

would decrease. The USPP would review and expand law enforcement services as necessary to ensure that services remain at adequate levels.

3.9.2.5 Cumulative Effects

The PTMP EIS analysis of cumulative impacts on utilities and services, including water, disposal of wastewater, storm drainage, solid waste, electricity and natural gas, and fire protection and law enforcement took into account the combined demand of Presidio development (including new uses in the PHS district) and other demands outside the park. The analysis concluded that the combined effect of Presidio and other local development would have a negligible effect on service providers. Many of the Presidio's older infrastructure systems have been subject to significant upgrading and replacement. The Trust has a capital investment program designed to bring these systems up to current standards so that they may serve new uses. The PTMP lists safety, efficiency, and long-term sustainability as primary goals of upgrading and replacement work.

The Trust would provide utilities for new uses or would require its private development team(s) to secure necessary utilities at their own expense from outside the park. Utilities would be installed within development areas under requirements prescribed by the Trust and/or service providers. Private development team(s) would be charged no less than the full cost for the use of the services.

With respect to cumulative demand of Presidio development on outside service providers, the Presidio demand for off-site water represents less than ¼ percent of the projected total demand in the CCSF service area (PTMP EIS, page 372). The need for water purchases from the CCSF would be minimized through implementing aggressive water conservation and the use of recycled water. Future wastewater flows from the park to the City's sewage treatment system would represent less than ½ percent of the capacity of either of the City's plants where these flows are treated, and implementation of the proposed water recycling project would result in a direct reduction in flows that would otherwise go to the City's system for treatment and disposal (PTMP EIS, page 373). Regional landfills have sufficient capacity to accept Presidio debris, and much of the debris would be diverted from the waste stream. With regard to energy management, Presidio development would occur in a way that uses energy wisely and economically through sustainable practices and design to minimize the park's impact on regional energy demand. The Presidio Fire Department would continue to adjust its operations in order to maintain reasonable levels of fire safety and emergency services consistent with NFPA standards. Similarly, USPP law enforcement services would be expanded as necessary to serve the increased demand for calls. Therefore, Presidio development is expected to have the least possible impact on park or outside service providers' resources, administration, management, or customers.

3.9.3 MITIGATION MEASURES

The following measures are adapted from the PTMP EIS and would apply to all alternatives to mitigate impacts on utilities and services.

3.9.3.1 Water Supply and Demand

UT-1 Demand Management Best Management Practices – The Trust, in cooperation with all its tenants and residents, will continue to implement best management practices that encourage water conservation, including the following:

- Installing low-flush toilets, low-flow showerheads, and other water-saving devices in all buildings;
- Integrating non-invasive, drought-tolerant, low-maintenance landscaping into the development areas to the extent possible to promote efficient and effective water application;
- Retrofitting landscaped areas with low-flow irrigation devices; and
- Informing tenants and residents of water conservation practices.

3.9.3.2 Wastewater Treatment and Disposal

UT-4 Reduction of Onsite Wastewater Generation – The Trust will implement water conservation best management practices described in Mitigation Measure UT-1 to limit water usage at the Presidio, which will reduce wastewater generation as well. The on-site sewer infrastructure will also be rehabilitated (i.e., slip-lined and broken and cracked sections of pipe replaced) as necessary to reduce storm water infiltration into the wastewater system.

3.9.3.3 Storm Drainage

UT-6 Storm Water Drainage System Upgrades – To maintain adequate system capacity and to correct existing operational problems, the Trust will ensure that necessary upgrades to the storm water drainage system be performed. All surface water flow will be directed toward the City and County of San Francisco's combined sewer system and not to Mountain Lake or Lobos Creek.

UT-7 Storm Water Reduction – The Trust will implement designs or measures to limit or eliminate impervious surfaces in order to reduce storm water runoff volumes and improve water quality. The Trust will practice natural storm water reduction by using on-site vegetation and landscaping as filtration and retention systems to the extent feasible.

3.9.3.4 Solid Waste

UT-8 Waste Diversion – Cost-effective, environmentally protective alternatives to disposal of demolition debris will be required, including the following:

- Maximizing reuse and recycling of construction and demolition materials consistent with a construction and demolition debris management plan;
- Clearing salvageable items from structures prior to demolition activities, including such items as piping, flooring, doors, windows, bathroom fixtures and kitchen fixtures, hospital equipment, heaters, and lumber;

- Removing and encapsulating contamination before demolition to minimize co-mingling of the wastes and to maximize reuse of the uncontaminated materials;
- Bringing down buildings piece by piece to recover the maximum amount of reusable materials; and
- Size-reducing (especially concrete) and pre-sorting and segregating materials after demolition to increase salvage value of the recovered materials and to decrease tipping fees for different materials in the debris; and
- Recycling materials on-site to reduce both hauling and disposal costs.

3.9.3.5 Gas and Electrical Systems

UT-11 *Environmental Building Design* – The Trust will incorporate the site’s environmental conditions in building design solution, maximizing solar energy and utilizing natural light.

UT-12 and UT 13 *Energy Conservation* – The following practices will be employed within the district to minimize the environmental impacts of energy consumption:

- Develop specific measures to minimize building energy use for buildings to be renovated;
- Meet or surpass the energy conservation requirements of California Title 24 energy code during building rehabilitation where these requirements do not conflict with historic preservation objectives;
- Carry out cost-effective energy conservation retrofits of buildings and utility infrastructure;
- Educate tenants and visitors about energy conservation;
- Develop energy conservation and efficient energy generation demonstration projects in individual buildings;
- Participate in energy-efficient appliance and computer purchasing programs; and
- Install energy management systems in all non-residential buildings both to monitor energy use and to enable remote troubleshooting and building controls.

3.9.3.6 Fire Protection and Law Enforcement

CO-12 *Expansion of Public Safety Services* – The Trust will work with the Presidio Fire Department and the USPP to identify any appropriate increases in staff, equipment, and facilities in order to provide adequate services to a residential community in the PHS district. Alternatively, the Trust will consider contracting with the San Francisco Fire Department for fire protection and emergency medical response. Should the Presidio Fire Department provide these services, they have indicated a need for additional personnel, equipment, and facilities to improve response times to southern areas of the Presidio (i.e., Wherry Housing and the PHS district). At a minimum, the Trust has agreed to provide space within an existing building at Wherry Housing or the PHS district to house an on-duty staff of two

firefighter/paramedic positions and to provide adjacent space for a paramedic (ALS) ambulance. These would be provided upon occupancy of the PHSH project while the Trust and the Presidio Fire Department undertake negotiations regarding possible additional staff, equipment, and/or permanent facilities.

3.10 Geology and Soils

3.10.1 AFFECTED ENVIRONMENT

The geology of the Presidio is described on page A-5 (Volume III) of the PTMP EIS, which states that “site specific development projects implementing the Plan will require supplemental review to evaluate geologic and seismic hazards.”

The project site is located in a seismically active region. Four major active faults lie near the site: the San Andreas Fault (about 5.2 miles southwest), the North San Gregorio Fault (about 7.8 miles west), the Northern Hayward Fault (about 13.0 miles northeast), and the Rodgers Creek Fault (21.7 miles north). The project site is expected to experience periodic minor earthquakes and possibly a major earthquake (Moment magnitude [Mw] greater than 6.7 [California Division of Mines and Geology 1996]) on one or more of these nearby faults during the life of the proposed development. Numerous earthquakes have been recorded in the region in the past, the largest of which was the 1906 San Francisco Earthquake (Mw of 7.9), which occurred on the San Andreas Fault. The most recent earthquake to affect the Bay Area was the Loma Prieta Earthquake of October 17, 1989, with a Mw of 6.9 km, in the Santa Cruz Mountains approximately 57.2 miles from the site.

The Working Group on California Earthquake Probabilities at the U.S. Geologic Survey (USGS 2002) predicted a 62-percent probability of a Mw of 6.7 or greater earthquake occurring in the San Francisco Bay Area by the year 2032. More specifically, the estimated 30-year probabilities of a Mw of 6.7 or greater earthquake for the Hayward-Rodgers Creek, San Andreas, and San Gregorio Faults are 27, 21, and 10 percent, respectively. Historically, ground surface displacements closely follow the trace of geologically young faults. The project site is not located within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site. Therefore, the risk of surface faulting is very low (Treadwell & Rollo, Inc. 2003).

Large earthquakes of the type likely to occur during the life of the project may be expected to cause very strong ground shaking at the site. This shaking can result in ground failure such as that associated with soil liquefaction, lateral spreading, seismically induced densification of natural or fill soils, and landsliding. The project site is expected to experience seismic shaking and possible damage in approximately the same proportion as the surrounding areas of the Presidio and San Francisco.

Settlement caused by seismic densification may be especially noticeable where thick bodies of poorly compacted fill occur, such as beneath the large parking lot southwest of Wedemeyer Street. This parking lot is partly supported on waste fill, known as Landfill 10, deposited over many years by the U.S. Army.

The Trust is now evaluating options for stabilizing this fill. Preliminary analyses indicate the fill would be subject to some settlement and the southwestern face of the fill deposit might experience minor landsliding in a large earthquake, but the extent of these deformations would be in the range of one foot or less. Based on the analyses to date, deformations of this size are not expected to pose a significant threat to the project site, surrounding residences, or adjacent natural areas.

According to a building seismic analysis prepared for the City and County of San Francisco (Fong & Chan Architects 1990), the PHSB buildings are generally usable and in good condition, with no indication of serious structural damage to the primary structural systems from recent or past earthquakes, settlements, or overloads. Damage to interior finishes and some areas of exterior cladding and deterioration from age or other causes were observed. Also, neither the original 1932 hospital nor the 1952 addition meet current safety standards or conform to code requirements for seismic forces, and would require seismic upgrading (Fong & Chan Architects 1990; Architectural Resources Group 1991; Faye Bernstein & Associates 1999).

The Battery Caulfield site contains three underground storage areas (magazines) that were previously used as a Nike Missile facility. Each magazine is founded on 0.5- to 2.5-foot-thick concrete slabs, at depths of 14 to 23 feet below the existing ground surface, with perimeter walls consisting of 12-inch-thick reinforced concrete. The site is underlain by about 1 to 25 feet of fill (becoming thicker toward the south), consisting primarily of interbedded sand and clay. Beneath the fill is native sand and clay, extending to depths of 17 to 42 feet below the ground surface. Below these depths, the site is underlain by serpentinite bedrock of the Franciscan Complex. The groundwater is at 10 to 30 feet below the ground surface.

3.10.2 ENVIRONMENTAL CONSEQUENCES

The following impact evaluation is based on a structural engineering report for Building 1801 (Faye Bernstein & Associates 1999) and a geotechnical feasibility study for the Battery Caulfield site (Treadwell & Rollo, Inc. 2003).

3.10.2.1 Alternative 1: PTMP or No Action Alternative

Building rehabilitation for the proposed uses under this alternative would be geologically and geotechnically feasible. Unless the building is upgraded, in a moderate to major earthquake, the seismic joints between the 1932 PHSB and the 1951 wings (being less than required by current code) would experience differential movement resulting in “pounding” along the joints between the original building and the 1951 wings. Such pounding frequently results in extensive damage (ranging from falling brick and terra cotta to collapse). Rehabilitation of the buildings using standard structural engineering techniques for foundations and building structural features consistent with established practice would result in structural upgrades that would add lateral/seismic resistance in the event of a major earthquake. Seismic design would be based on the criteria established in the California State Historical Building Code. Buildings that would be used for educational uses would be rehabilitated in compliance with applicable provisions of the California Education Code. While one would not expect the same level of

performance as a new building, building rehabilitation and structural upgrading would reduce seismic risk to acceptable levels and would constitute a beneficial impact of Alternative 1.

3.10.2.2 Alternative 2: Infill Alternative

Building rehabilitation and new construction for the proposed uses under this alternative would be geologically and geotechnically feasible. Similar to Alternative 1, this alternative would use standard structural engineering techniques and would result in a successful retrofit for seismic safety purposes. Replacement construction under this alternative would be limited to the lower plateau and would be built to current standards and seismic design factors.

Excavations for the underground parking structure would encounter fill soils, native dune sands, or possibly sandy clay of the Colma formation, depending on location and depth. Fill soils would be segregated, profiled, and transported off-site for disposal at a licensed landfill. Native soil materials would be reused on the project site (if soil is required and the native materials are deemed suitable), or disposed offsite in accordance with applicable regulations. Construction of the underground garage would result in the creation of up about 10,000 cubic yards of excess soil. If this soil cannot be reused on-site for landscaping purposes or for compacted fill, removing the soil would require up to 2,000 truck round trips (evaluated under construction traffic impacts in Section 3.2, Transportation).

3.10.2.3 Alternative 3: No Infill Alternative

Building rehabilitation for the proposed uses under this alternative would be geologically and geotechnically feasible. Similar to Alternative 1, this alternative would use standard structural engineering techniques and would result in a successful retrofit for seismic safety purposes.

3.10.2.4 Alternative 4: Battery Caulfield Alternative

Building rehabilitation and new construction for the proposed uses under this alternative would be geologically and geotechnically feasible. Similar to Alternative 1, this alternative would use standard structural engineering techniques and would result in a successful retrofit of historic buildings for seismic safety purposes. Replacement construction would be built to current standards and seismic design factors. Within Battery Caulfield, new low-rise residential buildings would likely extend over the existing underground magazines. New buildings would be of light timber construction with plywood shear walls and roof diaphragms and concrete foundations with spread footings. The magazines may be used to support new improvements provided they can be backfilled with soil or concrete. Otherwise, they would have to be demolished and removed. In addition, existing fill within Battery Caulfield is likely not suitable for the support of proposed structures and associated improvements, and would be removed and reused/replaced as engineered fill. Settlement would be small and within acceptable limits. As recommended by the PTMP EIS and the geotechnical feasibility study, the stability of the fill slope would be further evaluated during the final geotechnical investigation and may include measures to improve slope stability.

3.10.2.5 Park Presidio Access Variant

The new direct access between the project site and Park Presidio Boulevard would not expose people or property to geologic or seismic hazards. Grading, excavation, and any fill operations during construction would minimize high cuts and fills. Slopes would be made as flat as possible both for embankment stability and to reduce slide potential in cuts. Designs for cut slopes, embankments, earthwork, sub-excavations, erosion control features, and any other pavement improvements would be built to standards set forth in the Highway Design Manual and subject to Caltrans geotechnical review to mitigate the potential for earthquake damage.

3.10.2.6 Cumulative Effects

All building rehabilitation and/or replacement construction within the Presidio is regulated by the Trust. The Trust would withhold development permits for any site with seismic hazards until geologic and soil conditions of the site are investigated and appropriate mitigation measures, if any, are incorporated into development plans. The California Geological Survey would provide additional policies and criteria to guide the Trust in evaluating and mitigating seismic hazards. Identifying and mitigating seismic hazards as part of the Trust's land use planning and permitting processes would reduce the threat to public health and safety and minimize the loss of life and property.

3.10.3 MITIGATION MEASURES

The PTMP EIS does not include mitigation measures related to geologic hazards, but indicates that site-specific engineering designs will be required of individual projects. For ease of compliance and monitoring, this requirement is presented here as a mitigation measure. This measure would apply to all alternatives and would effectively mitigate seismic hazards.

GE-1 *Geotechnical Report* – Prior to building rehabilitation and/or replacement construction, as part of a design-level site investigation report, a geotechnical engineer will investigate the site for seismic hazards and recommend measures for earthwork, seismic design, and other geotechnical issues to provide reasonable protection of structural and public safety given site-specific conditions. The geotechnical report will also provide final recommendations by a structural engineer regarding necessary improvements to existing buildings and foundations. Evaluation and mitigation of seismic hazards will be conducted under guidelines established by the California Geological Survey (1997). If construction is proposed at Battery Caulfield, the geotechnical report will include final recommendations for grading, foundation support, seismic design, and other geotechnical issues.

3.11 Hydrology, Wetlands and Water Quality

3.11.1 AFFECTED ENVIRONMENT

The PTMP EIS describes wetlands, streams, and drainages of the Presidio on pages 118 to 121 and storm water runoff and water quality issues on pages 188 to 189, and the descriptions are incorporated here by reference. The hydrologic environment and water quality of the PHSB district, including the Nike Swale wetland, are described in more detail below.

The PHSB district occupies a ridgeline and southward-sloping series of bluffs and plateaus. Maximum elevation is 330 feet in the north, descending to 150 feet at the southern project site boundary. This relatively open landscape sits over an ancient sand dune complex, which in turn lies over older rock of the Colma Formation (sedimentary sands and clays). Beneath these features, Mesozoic Franciscan bedrock (deformed sedimentary and volcanic mélange) is found in most of the district (Montgomery Watson 1996). Surface topography is altered in several locations in the district from past grading activities, resulting in the placement of artificial fill (locally derived and imported).

The PHSB district primarily drains southward into the Lobos Creek catchment. Eastern portions of the district drain to the Mountain Lake catchment. On-site, there are no named streams or perennial flowing channels. The primary receiving watershed of Lobos Creek supplies roughly 85 percent of the domestic water supply to residents of the Presidio through withdrawals from the Lobos Creek groundwater basin. In total, the PHSB district is estimated to consist of mostly pervious surfaces, with approximately 30 percent of the 42 acres occupied by buildings, paving, and other hardscape.

The district's physical structure, surface features, and drainage patterns are illustrated in Figure 22. The northern portion of the upper plateau contains the Battery Caulfield site and Buildings 1449, 1450, and 1451. The portion of the upper plateau south of Battery Caulfield includes the Nike Swale area, which contains the Nike Swale wetland, Landfill 8, a parking lot, and Buildings 1819 and 1818. The lower plateau contains the PHSB complex, consisting of Buildings 1801 through 1815 and 1828, parking, Landfill 10, and landscaped areas.

3.11.1.1 Surface Hydrology

Battery Caulfield – Surface runoff in this area primarily occurs from impermeable paved surfaces at the Battery Caulfield site. The three Nike Missile silos of the Battery Caulfield site occupy a paved plateau with service roads that drain into a storm water collection system. While surface inlets have been identified, a complete understanding of pipe and outfall locations is not possible because as-built drawings are unavailable. To address this uncertainty and better understand the apparent hydrologic connection between Battery Caulfield and the Nike Swale wetlands below, a field-based flow study was performed (Jones & Stokes 2003). Surface runoff collecting in Drains 1, 1a, 2, and 4 flows southward to hillslope outfalls, infiltrates into the soil through pipeline leaks, and flows farther southward as shallow subsurface flow (throughflow) down-gradient to the Nike Swale wetlands (see Figure 22). Other drains,

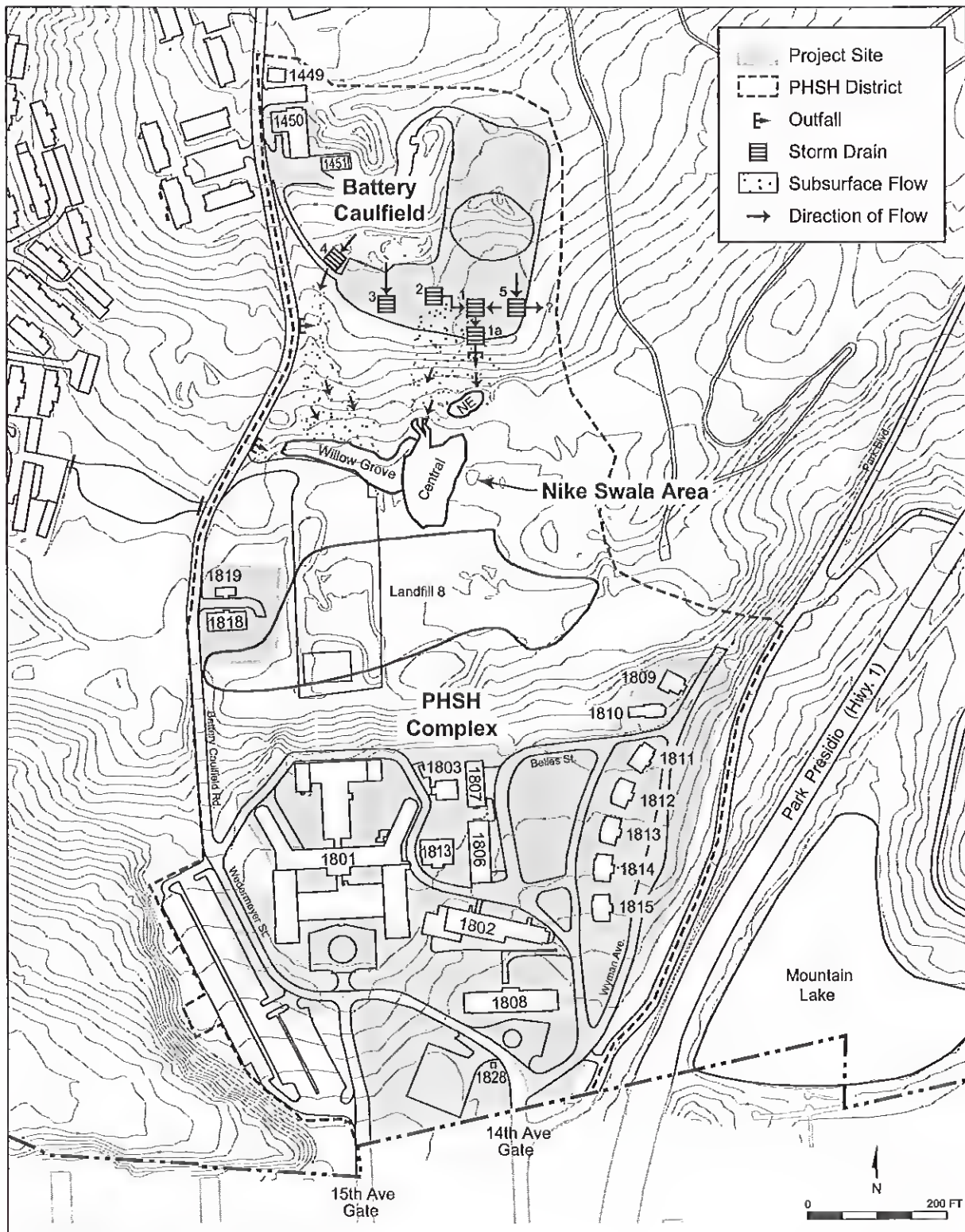


FIGURE 22. EXISTING SITE HYDROLOGY

Source: Presidio Trust, 2003

such as Drain 5 at Battery Caulfield (see Figure 22), collect and direct surface flow to outfalls leading toward the Nike Swale or toward the east outside of the district.

Nike Swale Area – The Nike Swale area is largely vegetated, except for a large paved parking area on the west side. The topography, soils, and geology of the Nike Swale area suggest high infiltration capacity of sandy soils, whereby most surface water infiltrates and likely flows down-gradient through the shallow subsurface soil horizon. As described above, the Nike Swale wetlands are supplied by surface water runoff from the Battery Caulfield upslope (see Figure 22). Blocked and leaking storm drain pipes, topography, and sandy soils direct runoff water from the paved Battery Caulfield site subsurface, where it flows to the wetlands. Runoff waters are also directed to the wetlands through outfalls off Battery Caulfield Road. The Nike Swale wetlands are further discussed in Section 3.11.1.4.

The Nike Swale area includes in its southern portion an historic landfill known as Landfill 8. The Landfill 8 area was used as a Merchant Marine cemetery and later as a PHSW waste disposal site (Presidio Trust 2001, Montgomery Watson 1996). The original landfill is now covered by a combination of pervious and impervious surfaces, including vegetation, a paved parking lot, and a tennis court. Similar to areas farther north, surface water infiltrates through the native sandy soils and fill material. Surface waters can then either be absorbed by vegetation and released through transpiration, infiltrate deeper to groundwater, or move southward in the shallow subsurface horizon.

PHSW Complex – Like the Battery Caulfield site, the PHSW complex is largely paved, and surface waters run off into a storm drain collection network. The PHSW complex consists of 15 buildings, parking lots, paved sidewalks, and landscaped areas. A natural spring on the southwest side of the PHSW complex may have once fed into Lobos Creek before the area was filled with waste from the PHSW (Urban Watershed Project 2001). The landfill, known as Landfill 10, was graded, covered, and paved for use as a parking lot. Storm drains leading to the City and County of San Francisco's 17th Avenue combined sewer system and connecting to the Richmond combined sewer line capture runoff waters from the parking lot and nearby paved areas during normal storm events (Urban Watershed Project 2001). The far east portion of the PHSW complex (Buildings 1809 through 1815) drains to Mountain Lake through culverts that pass under Highway 1.

3.11.1.2 Groundwater Hydrology

Battery Caulfield – Groundwater elevations in the Battery Caulfield site are found 10 to 40 feet below ground surface (Treadwell and Rollo 2003b). Groundwater movement is mostly controlled by bedrock contact and topographic slope. Three underground missile silos interrupt the groundwater table. These silos contain collected surface and ground waters. Water levels monitored in the silos showed response to seasonal fluctuations in the surrounding water table (Montgomery Watson 1999). However, water level inside the silos is no longer monitored. The silos may have a minor influence on groundwater elevations, velocities, and direction.

The three underground missile silos once contained large amounts of hydraulic fluid. To monitor hydrocarbon contamination from Battery Caulfield, five groundwater monitoring wells were installed and

numerous soil and groundwater samples were taken in and around the site from 1992 to the present (Treadwell and Rollo 2003b). Organic compounds in groundwater were not detected between 1994 and 1999 (Montgomery Watson 1999). However, benzene and toluene were detected in March 2003 (Treadwell and Rollo 2003b). Groundwater monitoring from 1995 through 2003 showed consistent flow to the south (and southeast) through Battery Caulfield.

Nike Swale Area – Groundwater has not been investigated in the Nike Swale area; however, studies at Landfill 8 have been conducted from 1994 to the present. Groundwater flow through the Landfill 8 area has consistently been south to southeast with hydraulic gradient occurring at a rate of 0.1 feet per foot (Treadwell and Rollo 2003b). The groundwater table is between 10 and 50 feet below the surface (Treadwell and Rollo 2003b). Figure 23 predicts the groundwater table elevation beneath the Nike Swale. Groundwater monitoring at Battery Caulfield and Landfill 8 shows that the groundwater table does not surface at the Nike Swale. Landfill 8 has been monitored for soil and groundwater contamination from wastes in the fill extending 15 feet beneath the surface. Organic compounds have not been detected at the site since 1996, with the exception of a cyanide detection in 2002 (Treadwell and Rollo 2003b). Contaminants were not detected in monitoring results from March and June 2003 (Treadwell and Rollo 2003b).

PHSH Complex – Avenues for groundwater infiltration at the PHS complex are restricted because of the higher proportion of impervious surfaces from buildings and parking lots. Groundwater in the easterly portion of the complex flows toward Mountain Lake, while westerly flows descend toward Lobos Creek. Groundwater elevation in the PHS complex is 40 to 50 feet below the surface (Treadwell and Rollo 2003b). The groundwater gradient, from the large parking area over Landfill 10 to the head of Lobos Creek, flows southwesterly 10 to 40 feet below the surface, while surface topography drops 60 feet.

3.11.1.3 Water Quality

Battery Caulfield – Surface water runoff from Battery Caulfield may convey pollutants from items stored in the area. The NPS and the Trust use the paved area to store tractors, landscaping materials, recycled asphalt, telephone poles, and other items potentially containing or leaking contaminants. During storm events, potential contaminants, such as sediment, oils, creosote, and hydrocarbons, from these stored items can infiltrate to soils and, ultimately, to the Nike Swale. Storm water runoff from Battery Caulfield is not treated with oil or sediment filters.

Nike Swale Area – Wetlands and native vegetation in the Nike Swale area retain, store, and filter runoff, sediment, and contaminants carried in surface water during storm events. This natural filtering system improves surface water and groundwater quality and provides habitat for birds and wildlife. The wetland area can be degraded from large deposits of sediments and high concentrations of contaminants washed from Battery Caulfield or the nearby road. The Trust's Regeneration Program currently conducts composting operations on the paved parking lot at the east end of the landfill. The Trust has employed management practices to prevent water quality degradation from the migration of compost and manure via wind and rain (Presidio Trust 2001).

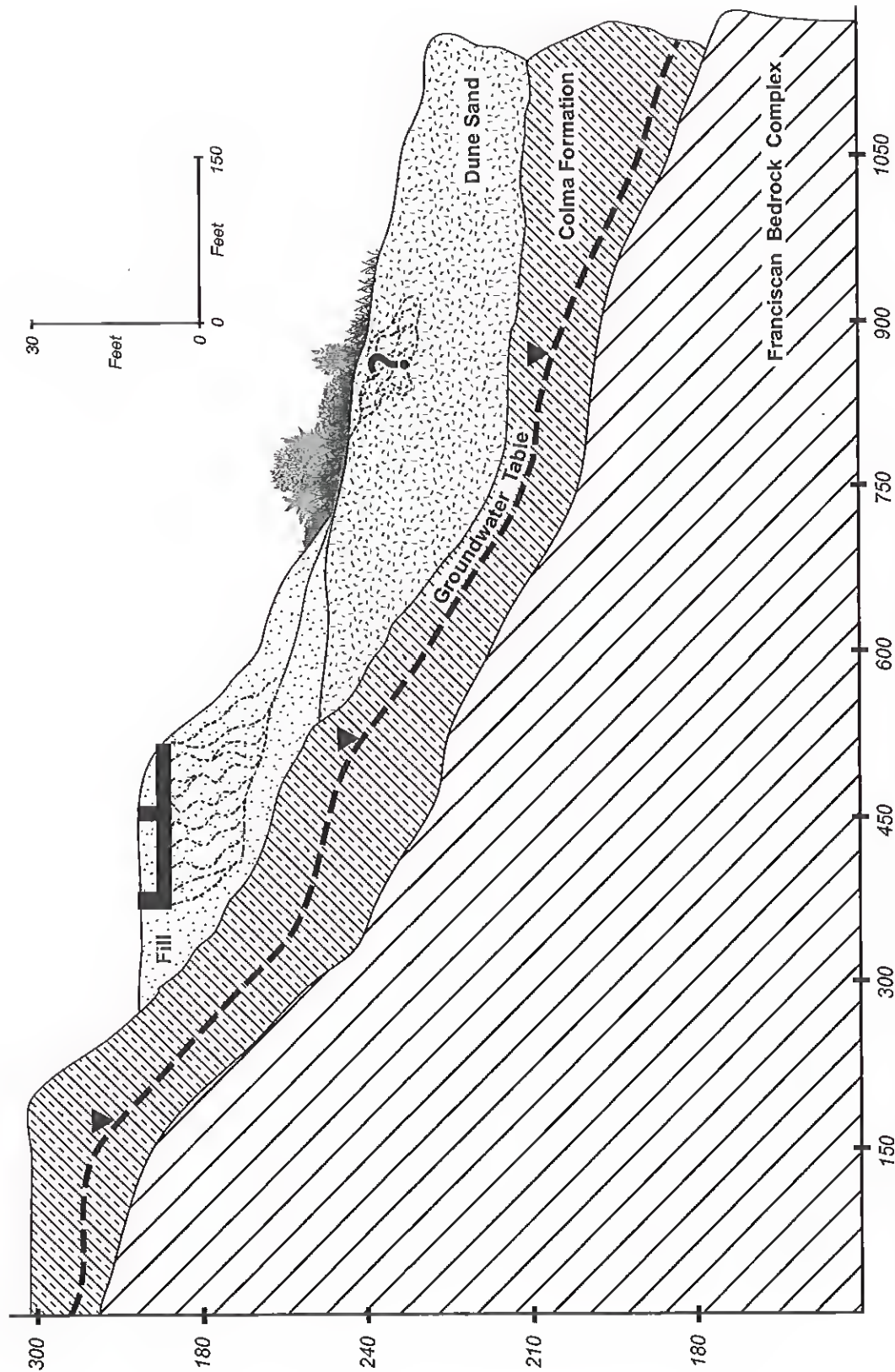


FIGURE 23. CONCEPTUAL CROSS-SECTION OF EXISTING HYDROLOGIC CONDITIONS AT BATTERY CAULFIELD

Source: Jones & Stokes, 2003

PHSH Complex – Storm drains collect and divert runoff water from the PHSB to a storm sewer line connected to the San Francisco Public Utilities Commission Richmond Transport Station (Presidio Trust 2003). The water quality of Lobos Creek is potentially threatened if storm drains at the PHSB are not maintained and therefore cause storm water to flow overland to Lobos Creek. Localized erosion has been noted on the west-facing slope of the parking area on the west side of the PHSB (Urban Watershed Project 2001). Additional erosion and slope failure could discharge hazardous materials and sediment from the underlying landfill, Landfill 10, to Lobos Creek. The Trust plans to resolve slope stability problems as part of its remediation program. Extensive parking lots in the PHSB complex provide a potential source of water quality impairment from oil- and hydrocarbon-contaminated runoff if drainage is prevented from passing to the storm water system.

3.11.1.4 Wetlands

The Nike Swale is a collection of small dune slack wetlands (Presidio Trust 2002). The wetlands have been surveyed by standard delineation methodologies. The wetland area is divided into three separate wetlands: Willow Grove, the Central site, and the Northeast site (NPS & URS Corporation 2003). The Willow Grove wetland appears on the north side of the parking lot west of the Nike Swale. The Central and Northeast wetlands appear at the toe of the upper plateau hillslope. All three wetland features exhibit clayey-sandy soils classified as Sirdrak Sand (NPS & URS Corporation 2003).

The specific water balance and hydrology of the Nike Swale wetlands were not identified in previous studies, although several observations have been made. For example, soils in the wetland area are generally saturated during the rainy season. In the drier season, adjacent soils dry out, although the immediate wetland area can remain moist. Previous groundwater sampling data from Battery Caulfield and Landfill 8 suggest that these wetlands are not supported from the day lighting of the water table because the groundwater table is 10 to 30 feet below the wetlands surface (see Figure 23).

To better identify the hydrologic source for the Nike Swale wetlands, a flow study was conducted that indicated the swale is supplied by shallow subsurface flow fed by the storm drain network (that is blocked and leaking) at Battery Caulfield, and from Battery Caulfield Road (Jones & Stokes 2003). Shallow subsurface flow is generally intermittent, being augmented from storm events, but it can support soil moisture long after individual storm events. Runoff from Battery Caulfield flows subsurface via two paths: south through an outfall from Drain 1a on the hillslope, and southeast through outfalls from Battery Caulfield Road and Drain 4 on the west side of Battery Caulfield. The Central and Northeast wetlands receive subsurface flow waters from the outfall of Drain 1a. Outfalls from Battery Caulfield Road and Drain 4 direct subsurface flow to the Willow Grove wetland (see Figure 22). The Willow Grove wetland may also collect north-flowing runoff from the parking lot west of the Nike Swale.

3.11.2 ENVIRONMENTAL CONSEQUENCES

The PTMP EIS discussed potential changes to hydrology and water quality on pages 240 to 246 and 335 to 341. These discussions are incorporated here by reference and supplemented below by analysis of issues specific to the PHSB project alternatives.

3.11.2.1 Alternative 1: PTMP or No Action Alternative

Alternative 1 involves rehabilitation of the existing PHS complex and requires no new construction. The Battery Caulfield site would not be affected by Alternative 1, and maintenance operations would continue. Resulting changes to hydrology, groundwater, and wetlands under this alternative would not be appreciable. Impervious surfaces and storm water runoff would not noticeably change from existing conditions, nor would any subsurface activity occur that might influence groundwater. Without proper controls, renovation of the PHS complex would have the potential to degrade water quality through increased use, increased vehicle activity, and short-term construction activities. Indirect impacts that can be associated with intensification of site use include increases in concentration of oils, lubricants, grease, sediment, and other pollutants commonly contained in urban runoff. Mitigation measures (addressed below) would reduce these potential water quality impacts to a less-than-significant level.

3.11.2.2 Alternative 2: Infill Construction Alternative

Alternative 2 differs from Alternative 1 in that the ground floor transect of Building 1801 would be removed, building wings would be reduced, and an underground parking structure would be built in the existing basement footprint. East of the PHS complex, two new residential buildings would be constructed, including one three-story building and one single-story unit. The addition of approximately 0.5 acre of a grass landscaped area above the new underground parking facility at Building 1801 may increase rainfall infiltration, reduce site runoff, and provide a water quality filtering benefit. The new three-story residential building would be built in the existing footprint of Belle Street. The single-story residential unit would be constructed in a vegetated area south of Building 1815. These new buildings have the potential to increase the quantity of surface runoff compared to existing conditions at the site. However, a substantial alteration to surface hydrology is not anticipated. The new underground parking facility is not expected to change groundwater conditions as groundwater elevations are sufficiently below the surface. Mitigation measures (addressed below) should reduce these potential impacts to a less-than-significant level.

The water quality impacts of Alternative 2 would be similar to those of Alternative 1. The Battery Caulfield site would not be affected by Alternative 2, and maintenance operations would continue. Intensification of site use, increased vehicle activity, and short-term construction activities related to building renovation/construction may increase the concentration of oils, lubricants, grease, sediment, and other pollutants commonly contained in urban runoff. Mitigation measures (addressed below) would reduce these potential water quality impacts to a less-than-significant level.

3.11.2.3 Alternative 3: No Infill Alternative

Alternative 3 involves removal of wings from Building 1801 and no underground parking facility or other new construction. The Battery Caulfield site would not be affected by Alternative 3, and maintenance operations would continue. In removing the building wings, Alternative 3 would provide an additional acre of grass landscaped area and provide a hydrology and water quality benefit through increased infiltration and reduced runoff. Similar to Alternatives 1 and 2, the intensification of site use, increased vehicle activity, and short-term construction activities related to building renovation/demolition may

increase the concentration of oils, lubricants, grease, sediment, and other pollutants commonly contained in urban runoff. Alternative 3 differs from the previous alternatives in its greater extent of building demolition and removal. Mitigation measures (addressed below) would reduce potential water quality impacts to a less-than-significant level.

3.11.2.4 Alternative 4: Battery Caulfield Alternative

Alternative 4 includes elements of Alternatives 2 and 3 at the PHSB complex and also involves new residential construction at Battery Caulfield.

Battery Caulfield – Construction of new homes, roadway features, and landscaping at Battery Caulfield would potentially alter site hydrology and groundwater conditions. Because the existing site condition is largely impervious, additional residential development would not substantially alter the degree of surface runoff or infiltration. However, the drainage and routing of such runoff would likely be altered through any new development. These potential changes to hydrology and groundwater are not considered appreciable (and can be mitigated for). However, owing to the site's hydrologic connection to the Nike Swale wetlands below, on-site development that alters the quantity, timing, and delivery of surface and subsurface flows to the Nike Swale can directly influence the functioning of the Nike Swale wetlands. Without adequate mitigation that preserves the functioning hydrologic connectivity between Battery Caulfield and the Nike Swale, this effect would be considered significant. Additionally, increased runoff from the irrigation of landscaped areas during the summer dry season may alter subsurface drainage conditions and increase water delivery to the wetlands during the summer dry season.

New residential activities at Battery Caulfield might affect water quality by introducing water contaminants from landscaping fertilizers or increasing vehicle use. Concentration of oils, grease, herbicides, and nutrients might degrade the quality of waters running off from Battery Caulfield into the Nike Swale. Degraded water quality might contaminate subsurface soils that could then migrate to and degrade the wetlands. Compared to the site's current use, however, a conversion to residential use would likely reduce the presence of certain contaminants. Overall, a net decrease in water quality contaminants could result from this alternative. Mitigation measures (addressed below) would reduce these potential impacts on water quality to a less-than-significant level.

PHSB Complex – Alterations to water resources associated with renovation/construction of Building 1801 and the residential buildings at the PHSB complex are consistent with conditions described above under Alternative 2.

3.11.2.5 Park Presidio Access Variant

This variant would provide improved vehicular access to the PHSB district under Alternatives 2, 3, and 4. New construction to widen existing roads and create a new intersection would require grading and removal of vegetation. Resulting increases in impervious surfaces and vehicular use are expected to increase storm water runoff and concentrations of urban runoff contaminants. Unless addressed, construction and operational runoff could potentially threaten water quality in nearby Mountain Lake.

During construction, the Trust would implement best management practices to prevent discharges to Mountain Lake. The Trust has requested that Caltrans redirect storm water flows from Park Presidio Boulevard away from Mountain Lake. The Park Presidio Access Variant is not expected to substantially alter hydrology, groundwater, or water quality if best management practices are implemented and if surface runoff to Mountain Lake is reduced. Reduction would be achieved by redirecting runoff in the vicinity of the Wyman Avenue houses, and redirecting surface flows from Park Presidio Boulevard subject to Caltrans agreement.

3.11.2.6 Cumulative Effects

Implementation of the PHSB project could potentially contribute to the cumulative degradation of surface and groundwater quality from changes to local hydrology and increased contamination that may result from new construction and land use activities at Battery Caulfield and the PHSB complex. However, the Trust's effort to restore, enhance, and expand wetland habitat provides long-term beneficial impacts that outweigh potential short-term impacts. Mitigation measures adopted as part of the project, including implementation of a storm water pollution prevention plan and best management practices, would reduce potential cumulative impacts on surface water and groundwater quality to a less-than-significant level.

3.11.3 MITIGATION MEASURES

The following mitigation measures are based on the PTMP EIS and have been modified (where necessary) to incorporate and respond to the PHSB project. Measures would apply to all alternatives except where noted.

NR-11/13 *Battery Caulfield and Wetlands/Compliance (Alternative 4 only)* – To avoid potential impacts on (and preserve) the hydrologic functioning of the Nike Swale wetlands, the Trust will specifically address water delivery and water quality requirements to the Nike Swale through the following mitigation measures.

- Water balance conditions of Nike Swale wetlands will be identified to assess general rates of water supplied to wetlands.
- Hydrologic conditions of proposed development will be evaluated in terms of storm water runoff rates and potential dry summer season inputs to soil moisture from garden irrigation.
- A storm water and drainage plan for proposed Battery Caulfield development will be designed (in light of the two above points) to maintain adequate water supply to existing wetlands features. This drainage plan will consider the potential role that (a) decreases of winter-related runoff or (b) increases in summer soil moisture may have in significantly affecting the wetlands.
- The storm water and drainage plan for the proposed Battery Caulfield site will evaluate how changes/replacement (of drains, pipes, and outfalls) of the existing storm drain network will affect the delivery of flows to the Nike Swale wetlands.

The PHS district is on an elevated plateau that separates Mountain Lake and Lobos Creek (see Figure 24). Prior to its development, the area was part of the vast San Francisco dune complex that stretched across the northern half of the San Francisco peninsula. Somewhat sheltered from the immediate coast, the area developed stable dunes that supported dune scrub vegetation in various stages of succession and regeneration (USFWS 2003). Development within the PHS district significantly altered natural dune processes (e.g., sand transport, sand accumulation, and wind erosion) and removed much of the existing vegetation. Only remnant dune patches remain.

3.12.1.1 Existing Biological Habitats and Resources

Remnant and restored dune patches in the vicinity of the PHS district currently support unique and ecologically significant native plant communities and provide important habitat for wildlife, including the largest known California quail (*Callipepla californica*) population in the San Francisco region. Five of these areas, two west of Battery Caulfield Road and outside the PHS district, one north of Building 1801, one west of the Presidio Golf Course, and one in the restored dunes at Lobos Creek (also outside the PHS district), are included in the Presidio recovery unit for the San Francisco lessingia (*Lessingia germanorum*) (USFWS 2003). The remnant dune north of the hospital supports a locally rare example of coast live oak woodland (Vasey 1996) and small colonies of San Francisco lessingia, San Francisco spineflower (*Chorizanthe cuspidata* var. *cuspidata*), and San Francisco dune gilia (*Gilia capitata* ssp. *chamissonis*) (Doherty 2002). The central part of the project area includes the Nike Swale, a graded and filled dune area that supports locally rare coastal dune slack (i.e., a freshwater-filled dune depression) vegetation. The NPS restored native vegetation within the dune sites, and the sites are currently protected and managed pursuant to the PTMP. A sixth dune remnant north of Battery Caulfield provides important California quail nesting and foraging habitat (Presidio Trust 2002e).

Four native plant communities occur within the vicinity of the PHS district: freshwater seep, central coast riparian scrub, central dune scrub, and coast live oak woodland (see Figure 24). Non-native plant communities and developed and landscaped areas also occur in and adjacent to the district.

Freshwater Seep – Freshwater seep vegetation occurs in areas where groundwater seepage creates permanently or periodically saturated soils. Freshwater seeps occur throughout the Presidio, including several small seeps within the Nike Swale south of Battery Caulfield (Castellini and Coffman 2003). Freshwater seep vegetation typically includes rushes, sedges, and other plants adapted to moist or wet growing conditions. Freshwater seep vegetation within the Nike Swale includes arroyo willow (*Salix lasiolepis*), wax myrtle (*Myrica californica*), and rush (*Juncus effusus*). Representative wildlife observed in this habitat includes marsh wren (*Cistothorus palustris*) and song sparrow (*Melospiza melodia*).

Central Coast Riparian Scrub – Central coast riparian scrub is a shrub-dominated community adapted to the high moisture levels and frequent flooding characteristic of areas along lakes, streams, and perennial springs. Near the PHS district, an isolated stand of central coast riparian scrub occurs along the southwestern edge of the Nike Swale in a small depression that receives and channels runoff from the district (Castellini and Coffman 2003). Riparian scrub within the Nike Swale includes shining willow (*Salix lucinda* ssp. *lasiandra*), arroyo willow, wax myrtle, rush, and California blackberry (*Rubus*

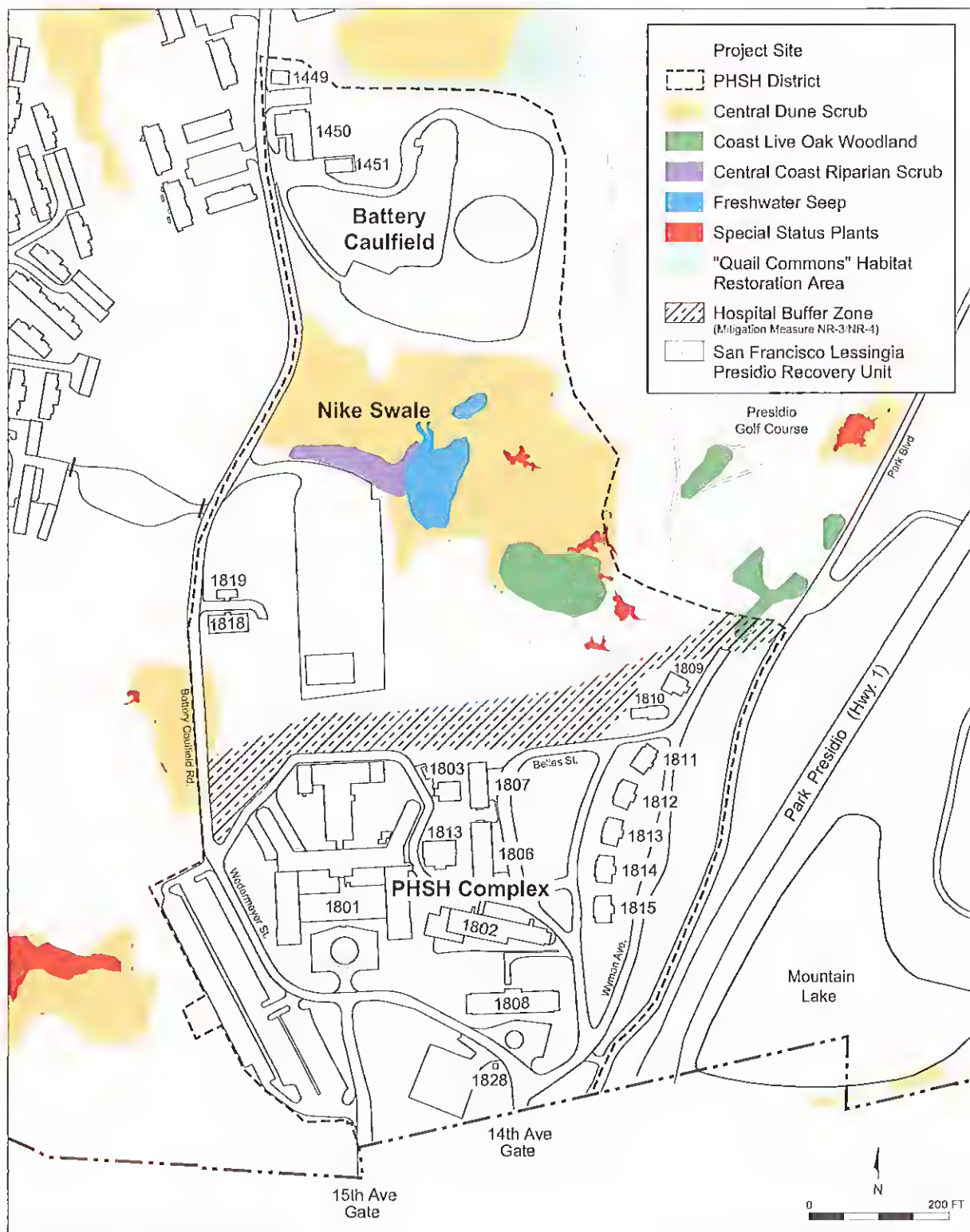


FIGURE 24. BIOLOGICAL RESOURCES

Source: Presidio Trust, 2003; USFWS, 2003

ursinus). Representative wildlife observed in this habitat includes Bewick's wren (*Thryomanes bewickii*), ruby-crowned kinglet (*Regulus satrapa*), yellow-rumped warbler (*Dendroica coronata*), and white-crowned sparrow (*Zonotrichia leucophrys*).

Central Dune Scrub – Central dune scrub occurs on stable dune deposits inland from the immediate coast. Central dune scrub occurs in patches over a total of 48.5 acres in the Presidio (Presidio Trust 2002b) and is rare in California. Near and within the PHSB district, patches of central dune scrub occur on the restored dunes north of Lobos Creek, west of Battery Caulfield Road, north of the PHSB, north of Battery Caulfield, and west of the Presidio Golf Course. Central dune scrub contains densely packed shrubs interspersed with sparsely vegetated openings in the shrub canopy. Common plants include mock heather (*Ericameria ericoides*), coyote brush (*Baccharis pilularis*), Chamisso's lupine (*Lupinus chamissonis*), dune knotweed (*Polygonum paronychia*), and dune buckwheat (*Eriogonum latifolium*). Dune field disturbances, including erosion, sand accumulation, and animal burrowing, create openings in the dune scrub that support several special-status plants, including San Francisco lessingia, San Francisco spineflower, San Francisco campion (*Silene verecunda* ssp. *verecunda*), San Francisco wallflower (*Erysimum franciscanum*), and San Francisco dune gilia. Representative wildlife observed in this habitat includes wintering Bewick's wren, house finch (*Carpodacus mexicanus*), California towhee (*Pipilo crissalis*), and white-crowned sparrow.

Coast Live Oak Woodland – Coast live oak woodland occurs on sheltered, stable dune deposits away from the immediate coast. A stand of small, multi-trunked coast live oaks occurs on a relict dune northeast of the PHSB. Coast live oak woodland occurs on only 5.3 acres in the Presidio (Presidio Trust 2002b). Representative wildlife observed in this habitat includes Hutton's vireo (*Vireo huttoni*), western scrub-jay (*Aphelocoma californica*), yellow-rumped warbler, and white-crowned sparrow.

Non-native Plant Communities – Non-native plant communities are dominated by species that humans have deliberately or accidentally introduced. Non-native plants in the vicinity of the project site include non-native annual grasses on landfill north of Building 1801, a non-historic Monterey pine (*Pinus radiata*) stand on the slope behind the PHSB, and iceplant (*Carpobrotus edulis*) mats on the slope below Battery Caulfield. Representative wildlife observed in this habitat includes northern flicker (*Colaptes auratus*), Eurasian starling (*Sturnus vulgaris*), chestnut-backed chickadee (*Poecile rufescens*), and pygmy nuthatch (*Sitta pygmaea*).

Developed and Landscaped Areas – Developed and landscaped areas include buildings, landscaping around buildings, ornamental plantings, parking lots, and paved roads. Developed and landscaped areas in the PHSB district include the PHSB complex, outlying buildings (Buildings 1450, 1818, and 1819), Battery Caulfield on the upper plateau, Battery Caulfield Road, and the Presidio Golf Course.

3.12.1.2 Special-Status Species

Special-status species are those species legally protected under the Federal Endangered Species Act (FESA), species proposed or candidates for listing under FESA, and "sensitive" species that are considered sufficiently rare by the scientific community to qualify for such listing.

Special-Status Plants – Of the 13 endangered, threatened, and sensitive plants found on the Presidio, five occur in the vicinity of the project site (Doherty 2002), as described below. A summary of these species is provided in Table 20.

Table 20. Known Occurrences of Special-Status Plant Species Near the Project Site

COMMON NAME	SCIENTIFIC NAME	FEDERAL/STATE/CNPS STATUS
San Francisco spineflower	<i>Chorizanthe cuspidata</i> var. <i>Cuspidata</i>	(FSC)/--/1B
Dune gilia	<i>Gilia capitata</i> ssp. <i>chamissonis</i>	--/--/ 1B
San Francisco lessingia	<i>Lessingia germanorum</i>	FE/CE/1B
San Francisco wallflower	<i>Erysimum franciscanum</i>	(FSC)/--/4
San Francisco campion	<i>Silene verecunda</i> ssp. <i>verecunda</i>	(FSC)/--/1B

Source: California Department of Fish and Game 2001.

Notes:

Status definitions:

-- = no listing status

Federal: U.S. Fish and Wildlife Service (50 CFR 17.12, 61 FR 40:7596-7613, February 28, 1996).

FE = listed as endangered under the Federal Endangered Species Act.

(FSC) = Federal Special Concern Species (former Category 2 candidates).

State: California Department of Fish and Game (1995).

CE = listed as endangered under the California Endangered Species Act.

CNPS: California Native Plant Society (Skinner and Pavlik 1994).

1B = List 1B species: rare, threatened, or endangered in California and elsewhere.

4 = List 4 species: a "watch-list" of plants of limited distribution.

San Francisco Lessingia. San Francisco lessingia is a low-growing annual in the sunflower family with deep lemon yellow flowers. It is endemic to the northern San Francisco peninsula from San Mateo County north to the Presidio. Four of the seven remaining lessingia colonies occur in the vicinity of the PHS district and are included in the Presidio recovery unit for the species (USFWS 2003). Lessingia populations occur in the restored dunes at Lobos Creek and in remnant dune patches west of Battery Caulfield Road, northeast of the PHS, and in a steep roadcut bordering the Presidio Golf Course.

San Francisco Spineflower. San Francisco spineflower is an annual plant in the buckwheat family with soft, hairy stems and white-to-rose flowers. It is restricted to open or sparsely vegetated areas on sand or sandy soils along the immediate coast, from San Mateo County to Southern Sonoma County (USFWS 2003). San Francisco spineflower occurs in the remnant dune patches northeast of Building 1801 and west of Battery Caulfield Road, and in the restored dunes at Lobos Creek.

Dune Gilia. Dune gilia is an annual plant in the phlox family with showy deep violet flowers. It is restricted mostly to vegetation gaps in low-growing central dune scrub and stable dune grassland from

San Mateo County to Sonoma County (USFWS 2003). Dune gilia occurs in the remnant dune patches northeast of Building 1801 and west of Battery Caulfield Road, and in the restored dunes at Lobos Creek (Doherty 2002).

San Francisco Wallflower. San Francisco wallflower is a perennial or subshrub in the mustard family with showy cream-colored to yellow flowers. It occurs in open or sparsely vegetated areas in several plant communities, including central dune scrub, foredune, bluff scrub, and serpentine grassland (Presidio Trust 2002b). San Francisco wallflower occurs in the restored dunes at Lobos Creek.

San Francisco Champion. San Francisco champion is a perennial plant in the pink family with white-to-rose flowers. It is restricted to dune scrub habitats between San Francisco and Santa Cruz (USFWS 2003). San Francisco champion was last observed at the Presidio in 1933 until it was reintroduced to the restored Lobos Creek dunes between 1996 and 1998. Only a few individuals survive today.

Special-Status Wildlife – Special-status wildlife species with potential to occur in the vicinity of the PHSB district are described below. A summary of these species is provided in Table 21.

San Francisco Forktail. The San Francisco forktail (*Ishmura gemina*) is a small damselfly endemic to the Bay Area, from Bodega Bay south to the Salinas River in Monterey County and eastward into Contra Costa and Alameda Counties (Manolis 2003). It was formerly considered a Federal Species of Concern because of its small range. Previous survey efforts located it at the Presidio, only near Fort Point (Presidio Trust 2002b). The freshwater seeps in the Nike Swale may provide suitable habitat for this species.

Nesting Raptors. Several species of raptors may nest in the PHSB district, including red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), and Cooper's hawk (*Accipiter cooperii*), although the latter has yet to be found nesting in San Francisco (Presidio Trust 2002b). The other four raptors may nest in the eucalyptus (*Eucalyptus* spp.) trees along the eastern edge of the Nike Swale and Battery Caulfield and in other large trees on and adjacent to the PHSB district. Active raptor nests are protected under CDFG Code 3503.5.

Long-eared Owl. The long-eared owl (*Asio otus*) is a rare local breeder, but it is a regular fall migrant and occasional winter visitor to coastal California. It is a CDFG Bird Species of Special Concern. Long-eared owls roost during the day in dense coniferous and other evergreen trees, often near open areas such as grasslands, wetlands, and open brushlands where they hunt at night for rodents and other prey (Grinnell and Miller 1944, Marks et al. 1994). Although this species is not likely to nest in the area, the conifers, oaks, and willow thickets throughout the PHSB district provide potential roost sites for this owl.

Olive-sided Flycatcher. The olive-sided flycatcher (*Contopus cooperi*) is a widespread but declining species throughout much of the forested regions in California (Altman and Sallabanks 2000). It is a CDFG Bird Species of Special Concern. These neotropical migratory birds are closely associated with large coniferous trees and snags, often on the edges of meadows, clearcuts, and other open areas where they sally for insects (Altman and Sallabanks 2000). In San Francisco, this flycatcher breeds in the

Table 21. Occurrences of Special-Status Wildlife Species Near the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS		POTENTIAL FOR OCCURRENCE IN PROJECT AREA
		FEDERAL/STATE	SC/--	
San Francisco fork-tail	<i>Ischnura gemina</i>	Local concern	SC/--	At the Presidio, only documented near Fort Point (Presidio Trust 2002b).
California quail	<i>Callipepla californica</i>	Local concern	Local concern	Nearly extirpated from San Francisco and the Presidio. A covey remains on Quail Commons and the project site (LSA Associates, Inc. 2001; Harley et al. 2003).
Western screech-owl	<i>Otus kennicottii</i>	Local concern	Local concern	Nearly extirpated from San Francisco and the Presidio. At least one pair remains near Inspiration Point (Jones & Stokes 1997).
Long-eared owl	<i>Asio otus</i>	--/SSC	--/SSC	No records available, but species is easily overlooked and is likely to occur at least rarely during migration.
Olive-sided flycatcher	<i>Contopus cooperi</i>	SC/SSC	SC/SSC	Breeds in the Presidio and documented on the project site (Rosegay 1996, Gardali 2001).
Willow flycatcher	<i>Empidonax traillii</i>	SC/E	SC/E	Probably an uncommon migrant on the project site and at the Presidio (Presidio Trust 2002b).
Hutton's vireo	<i>Vireo huttoni</i>	Local concern	Local concern	Documented from the project site and elsewhere at the Presidio (Presidio Trust 2002b, Rosegay 1996).
Loggerhead shrike	<i>Lanius ludovicianus</i>	--/SSC	--/SSC	Rare visitor with few records for the Presidio (Presidio Trust 2002b).
Wrentit	<i>Chamaea fasciata</i>	Local concern	Local concern	Probably extirpated from the Presidio and San Francisco (Gardali 2003).
Yellow warbler	<i>Dendroica petechia brewsteri</i>	--/SSC	--/SSC	Probably a common migrant on the project site and at the Presidio (Presidio Trust 2002b).
Yellow-breasted chat	<i>Icteria virens</i>	--/SSC	--/SSC	No records available, but species is easily overlooked and is likely to occur during migration.
Western red bat	<i>Lasiurus blossevillii</i>	FS/--	FS/--	Unknown; acoustic surveys will be conducted in spring of 2004; known from the San Francisco region.

Table 21. Occurrences of Special-Status Wildlife Species Near the Project Site

COMMON NAME	SCIENTIFIC NAME	STATUS		POTENTIAL FOR OCCURRENCE IN PROJECT AREA
		FEDERAL/STATE		
Townsend's big-eared bat	<i>Corynorhinus townsendii townsendii</i>	SC/SSC		Unknown; acoustic surveys will be conducted in spring of 2004; known from the San Francisco region.
Fringed myotis	<i>Myotis thysanodes</i>	SC/--		Unknown; acoustic surveys will be conducted in spring of 2004; known from the San Francisco region.
Long-eared myotis	<i>Myotis evotis</i>	SC/--		Unknown; acoustic surveys will be conducted in spring of 2004; known from the San Francisco region.
Long-legged myotis	<i>Myotis volans</i>	SC/--		Unknown; acoustic surveys will be conducted in spring of 2004; known from the San Francisco region.
Pallid bat	<i>Antrozous pallidus</i>	--/SSC		Unknown; acoustic surveys will be conducted in spring of 2004; known from the San Francisco region.

Source: Jones & Stokes.

SC = Species of Concern (Federal).

SSC = Species of Special Concern (State).

E = Endangered (both Federal and State).

FS = U.S. Forest Service Sensitive Species.

Presidio (Rosegay 1996) and also migrates through the area during the spring and fall. The conifers and eucalyptus trees in the PHSB district provide nesting and foraging habitat for this species.

Willow Flycatcher. The willow flycatcher (*Empidonax traillii*) is a California-listed endangered species that breeds in montane meadows and, in southern California, in lowland riparian areas (Grinnell and Miller 1944). In San Francisco, however, it is strictly a spring and fall migrant. The trees, shrubs, and especially the willows in the PHSB district provide foraging and roosting habitat for this species.

Loggerhead Shrike. The loggerhead shrike (*Lanius ludovicianus*) has declined in urban areas of California (Yosef 1996) and is a rare visitor to San Francisco. It is a CDFG Bird Species of Special Concern. Shrikes prey upon small vertebrates, including birds and large insects (Yosef 1996), and may occur sporadically during migratory movements in the open areas of the PHSB district, as they have occurred a few times in the Presidio (Jones & Stokes 1997). There are no nesting records for San Francisco (Presidio Trust 2002b).

Yellow Warbler. The yellow warbler (*Dendroica petechia*) has declined as a breeding bird throughout lowlands of California because of loss of riparian habitat and increased brown-headed cowbird (*Molothrus ater*) brood parasitism (Grinnell and Miller 1944, Lowther et al. 1999). It is a CDFG Bird Species of Special Concern. In San Francisco, these warblers are common migrants that are attracted to flowering eucalyptus and other exotic plants, as well as willows, pines, and various native shrubs where they forage on nectar and arthropods. Within the PHSB district, riparian habitat in the Nike Swale provides suitable foraging habitat for migrant yellow warblers.

Yellow-breasted Chat. The yellow-breasted chat (*Icteria virens*) has declined as a breeding bird throughout lowlands of California because of loss of riparian habitat and increased cowbird brood parasitism (Grinnell and Miller 1944, Eckerle and Thompson 2001). It is a CDFG Bird Species of Special Concern. In San Francisco, chats are rare migrants. The willow thicket in the Nike Swale provides suitable breeding habitat for this species.

3.12.1.3 Special-Status Bats

There are 13 bat species that could occur in the San Francisco region, six of which have some level of special status (Heady and Frick 2003). Bat species such as fringed myotis (*Myotis thysanodes*), long-legged myotis (*Myotis volans*), Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevilli*), and long-eared myotis (*Myotis evotis*) may roost and forage in the buildings within the PHSB complex. A survey conducted by Central Coast Bat Research Group in November 2003 determined that special-status bats are not using PHSB buildings for maternity roosts; however, Building 1807 does exhibit evidence of night roosting activity. Buildings in the 1800 series contain suitable habitat for bats because of the ceramic tile roofs, while window coverings on some buildings also provide roost habitat for these species (Heady and Frick 2003).

3.12.1.4 Species of Local Concern

California Quail – The California quail (*Callipepla californica*) is a common and widespread bird throughout much of California (Grinnell and Miller 1944). In San Francisco, however, its population and distribution has declined drastically since the 1980s, to the extent that the Golden Gate Audubon Society initiated a “Save the Quail” campaign (LSA Associates, Inc. 2001) and it is considered a Species of Local Concern (Presidio Trust 2002b). The Presidio currently has only one known population of California quail remaining. As a result, the Presidio has designed a quail habitat enhancement action plan intended to reverse this population decline.

Quail nest and forage in chaparral, dune scrub, oak savanna, riparian, and other habitats that provide perennial sources of water and ample cover to protect them from predators (Calkins et al. 1999). Nest sites are typically on the ground or slightly elevated in areas that provide protective cover such as dense clumps of grass and weeds, fencerows, shrubs, brush piles, fallen trees and limbs, and vines (Shuford 1993). In the Presidio, California quail breed at Quail Commons, which is just north of the PHS district (see Figure 24). It is unclear, however, whether quail from the lone Presidio covey breed there exclusively every year, or in adjacent areas, possibly including the PHS district (personal communication with Thomas Gardali, Point Reyes Bird Observatory).

Within the PHS district, quail breeding and foraging habitat is located in the Nike Swale and adjacent dune scrub habitat. There are two existing quail movement corridors located in the upper plateau of the PHS district. One is located along the eastern border of the PHS district adjacent to the Presidio Golf Course along the row of eucalyptus trees, and the second is located along the western edge of the PHS district in the row of Monterey pines (and other vegetation along Battery Caulfield Road). Quail may also use the large wax myrtle and other shrubs north of the maintenance yard as another movement corridor. These movement corridors are important because they provide safe links between Quail Commons and the restored dune scrub and riparian habitat along Lobos Creek.

During a visit to the PHS district on November 3, 2003, a Jones & Stokes biologist observed a flock of 13 quail above the Nike Swale at the western edge of the maintenance yard. Seven were males, including two color-banded individuals, and six were females, including one that was color-banded. The unbanded quail may be hatch-year birds indicating successful recruitment or they may be immigrants from other populations. All of the quail detected during banding activities and formal surveys in the fall of 2002 were at Quail Commons, with some individuals also detected across Battery Caulfield Road (Harley et al. 2003). One of the individuals banded at Quail Commons has been found in Golden Gate Park. Quail Commons and the immediate area surrounding Quail Commons contain the only known breeding population of California quail within the Presidio and one of few left in San Francisco. The Arhoretum in Golden Gate Park is another known breeding location in the region.

Western Screech-Owl – The western screech-owl (*Otus kennicottii*) is a common and widespread species throughout much of California (Grinnell and Miller 1944, Cannings and Angell 2001). In San Francisco, its only historic occurrence is at Inspiration Point at the Presidio, but it has been detected in recent years at Arguello Gate and Lobos Creek (Jones & Stokes 1997). It is considered a Species of

Adam Dierkhising
 Patricia and Gerald P. Dodson
 John Doxey
 Judith Dunham
 Lewis Ellingham
 Steven Eng
 Paul Epstein (2)
 Christina Farren
 Thomas Farren
 Carey Feierabend
 Cornelia Foster
 Carolyn and Jim Forsyth (2)
 Lanette and Ronald Frostestad
 Bill Gannon
 Phillip Gordin
 Bill Gorman
 Ruth Gravanis
 Helen A. Green
 Dorothy Gregor
 Elliot Grossbard, M.D.
 Laura Gurmar and Vladimir
 Churov
 Robert N. Hall
 Todd Heffelfinger
 William E. Henslin, Jr. (2)
 Sharon Herman
 Donald Heyneman
 Paul Hidy
 Mark Higbie (2)
 Ken and Gail High
 Julian Hoekken
 Charles Holden
 Rusty Holden
 Alan Hopkins
 Ellen Horstein
 Dave Hultman
 Jay and Marcia Hunt
 Bruce H. Jackson
 Eloise Jonas and Frank
 White (2)
 Steve Jones
 Jeffery Judd (2) and Colleen
 Prince
 Campbell Judge
 Sharon Kato
 Richard Keenan (2)
 Redmond Kernan
 James B. Kilgore
 Susan Kilgore
 Patrick Kiss
 Gretchen Knoll
 Alice Knox
 Chuck and Helen Lantz
 Mrs. Lanning

Eva Lee
 Minor Leongas
 Emily and William Leider
 Anton Lethin
 Meagan Levitan
 Andrea Lewin
 Claudia Lewis
 Martin and Elinor Liherman
 Charles Ling
 Minnete Liman
 Carson Lovell
 Neil Lynch
 Glenn McCrae
 Kathleen McNamara
 John Maccabee
 Jerry Mapp
 Lillian Maremont
 Robert Martinez
 Maria Matsu
 Evelyn Maye
 Amy Meyer
 Stephen Meyers
 Robert Minkowsky
 Carlos E. Monfiglio
 Neil Monnens
 Ryan Monaghan
 Margaret Moran
 The Morimoto-Minnich
 Family
 Miki Nakanishi
 Kelly Neil
 Philippa Newfield
 Karl Olson
 Diane Osoio
 Christine Pallato
 Sally Palmer (2)
 Barbara Paschke
 Stephanie Peek
 Ann Pinkerton
 David Rice
 Dan Richman
 Kate and Zeb Ripple (2)
 Fred Rinne
 Erin Roach
 Shirlee Roman
 Mark Sachleben
 Geffen Sagee
 Michele Sahl
 Robert and Alicia Sakai
 Brooke Sampson
 John-Austin Saviano
 Woody Scal (2)
 Jim and Laura Schlueter
 Scott D. Schwartz

Geoffrey B. Sears
 Judith Segard Hunt (3)
 J.J. Seiler
 Jean Seto
 Kevin Shannon
 Michael Shough
 John P. Shuhda
 Richard Smith
 Timothy Smith
 Irene Solomon
 Eric Solomon
 Anna Sojourner
 Karen Stark
 Robert F. Starzel
 Benjamin Stigler
 Daniel Stone
 Lynn Strandberg
 Wai Sui
 Lynda Sullivan
 Maria Susa
 Eric N. Swagel, M.D.
 Sarah Sweedler
 Nathan Szajnberg
 Kim Tan
 Mark P. Tellini (2)
 Lynn Terry
 Jana Thompson
 Tracy Thompson
 Yat-Ping Tong
 Jane Totten
 Sharon Tsiu
 Mike Van Dyke (3)
 Joanne Vlatinich
 Max Vlatinich
 Jed and Jana Wakefield
 Arnold Wasserman
 Mark Weinstock (3)
 Ann Weinstock (2)
 Alana Weinstock
 William and Helena Wheeler
 Vicki Wilderman
 Lawrence Wilkinson
 Russell S. Wilson
 Jesa Wolf
 Evelyn Wong
 S. Wu
 Nathaniel Wyatt
 Dorian Young
 Herb and Jane Young
 Nicholas Zaldersom
 Margaret K. Zegart (3)
 Matthew and Joanne Zlatunich

The written and oral comments addressed the following topic areas:

Need for Alternate Direct Access to PHS and other Traffic Issues	162 comments
Size of the PHS Development	150 comments
General Opinion of Project	119 comments
Public Safety	50 comments
Development at Battery Caulfield	44 comments
Protection of Quail Habitat	35 comments
Miscellaneous Natural Resource Issues	34 comments
Need for Adequate On-site Parking	29 comments
Type of Land Use	23 comments
Site Planning and Remediation	21 comments
Treatment of Historic Hospital Building	18 comments
Financial Requirements	15 comments
Planning and NEPA Processes	14 comments
Miscellaneous Historic Resource Issues	13 comments
Improvement of Visitor Experience and Recreational Use	8 comments
Cumulative Impacts	3 comments

The Trust carefully reviewed all comments and has taken them into account in preparing this EA. The comments have led to, among other changes, inclusion of the Park Presidio Access Variant, reduction in the size of two of the project alternatives, identification of the Preferred Alternative that does not include development at Battery Caulfield, and numerous specific textual discussions and analyses in Sections 1, 2, and 3. Some of the key issues raised during scoping are summarized below, together with a brief response regarding how the issues have been addressed in the EA.

Financial Requirements – The Sierra Club, NAPP, PAR, Fort Point and Presidio Historical Association, and others suggested that by stating a \$1 million annual base rent minimum, the Trust has effectively foreclosed the possibility of a smaller alternative (Alternative 3) for the project. They stressed that the base rent criterion could compromise the non-financial goals of the project. They also asserted that the \$1 million value is arbitrary, asked how it was determined, and claimed that stating any figure is premature until the EA is complete. A few commenters asked the Trust to explore funding certain costs to improve the financial return of the project.

Response. The Trust's goal, as stated in the RFQ and RFP and at public meetings during the scoping process, is to implement a project for the site that meets or balances all of the stated objectives – financial and all others. The Trust Act requires that the Trust give priority to prospective tenants that facilitate the cost-effective preservation of historic buildings through their reuse and seek tenants who can help the Trust meet its financial goals. Generating revenue from parkland assets has been a controversial idea from its inception, when the Trust Act was passed. Nonetheless, the Trust believes that by generating rent by leasing buildings within the district, the Trust can make progress toward its statutory mandate and the PTMP's stated goals. A long history of evidence supports the Trust's statement of \$1 million minimum rent value for the PHS project and the belief that this rent value would permit consideration of a full

array and varied mix of development proposals. Because the issue is so misunderstood, it warrants more detailed discussion.

No evidence has been presented that generating a minimum of \$1 million in annual base rent conflicts with any of the other project objectives or precludes any of the alternatives analyzed, including the smallest alternative. In fact, the analysis contained in this EA supports the opposite conclusion. The financial comparison of EA alternatives shows that all, including Alternative 3 (275,000 square feet), are feasible and have the potential to generate at least \$1 million in annual base rent. No alternatives have been foreclosed from selection.

The base rent criterion was not intended and has not been used by the Trust as a limitation. For an expensive project like the PHS project to be successful, the Trust needs to attract a highly experienced development partner with the relative financial wherewithal to raise large amounts of capital and to work out an economically feasible project if one is possible. The statement of a minimum base rent was a means for the Trust to define the level of necessary financial sophistication of a development partner for a complex historic preservation project like the PHS, not a means to define the size of the project. Setting a minimum annual base rent is a common real estate practice used to ground a lease offering at a realistic level. Here, the \$1 million should be understood as an initial guide and not as a goal. The figure is one among other criteria for the Trust to use in identifying potential project proponents who are serious about continuing in the development process and negotiating reasonable business terms, regardless of the eventual specifics of the selected project proposal.

The Trust made clear early in the process that it was interested in any well-considered proposal and that the annual base rent figure in no way limited the range of proposals that would be evaluated. In written response to questions on the RFQ and RFP from potential development teams, the Trust dispelled the notion that it had any specific project preference.⁴ One response noted, "As previously stated, the Trust has no preference for a specific project. The Trust will consider projects falling within the range permitted in PTMP, from maximum demolition with no new construction to maximum demolition with the permitted maximum new construction and any proposal in between."

In addition to these written responses, the Trust clarified the issue at a number of public forums. In response to questioning, the Trust stated that all proposals received would be considered. When asked whether a proposal yielding less than \$1 million annual base rent would be given consideration, the Trust again responded that any such proposal would be considered along with any and all others received. When a proponent team asked about the permissibility of multiple proposals, the Trust responded, "The Presidio Trust will not limit the number of proposals submitted or prohibit proposals identifying multiple schemes."⁵ Implicit in Trust responses was the understanding that some proposals would be more responsive on some project criteria than others, and that financial contribution was only one among many other criteria to be considered.

⁴ See RFP Addendum No. 2, Response to Question Q.5; RFQ Addendum No. 2, Response to Question Q.5; and RFP Addendum No. 4, Q.1.

⁵ See RFP Addendum 2, Response to Question Q.4.

Some commenters suggest that the Trust should have required developers to submit the smallest development alternative. In response, Trust staff explained that the developer proposals reflect a negotiating position rather than the final project. At this stage in the process, the Trust understands that the inherent bias of any development team is to maximize its return on investment. This can be achieved by offering the largest project the team believes is acceptable while giving up the lowest possible revenue to the Trust. The developers' present proposals are a starting point in the negotiations, and the final project will not be determined until the environmental review process is complete. The Trust Board has recently identified a development partner with whom to enter into exclusive negotiations on the PHSB project. Identification of a development partner does not, however, indicate a final decision or commitment to approve or execute a project identical to the selected team's physical proposal. Rather, following developer selection and release of the EA, the Trust will continue to solicit public input and also begin negotiations, using both the EA and the comments received to inform the specifics of the project ultimately selected. The \$1 million annual base rent will in the end have served as a tool and not a limitation.

Notwithstanding public commenters' objections to having stated a financial minimum, the Trust had sufficient basis to conclude that \$1 million was a reasonable minimum value for any development opportunity involving the main hospital itself. The value is based on and consistent with a variety of past and present Presidio-wide and hospital-specific feasibility studies and financial analyses such as the 1998 Financial Management Program, the 2002 PTMP EIS analysis, and other site-specific data and analyses.⁶

When in 2003 the Trust turned its attention to the possibility of leasing in the PHSB district, pre-existing information created financial grounding for the project. Independent market analysis undertaken for and relied upon in the PTMP financial modeling of the planning alternatives determined an average of \$3.60 per square foot for residential ground rent. Several years' experience with residential rental rates at the Presidio showed that on average the Trust could expect lease revenue of about \$3.50 per square foot. Applying these rates to even the smallest development alternative allowed under the PTMP (approximately 275,000 square feet) yields revenue of about \$1 million.

The developers' proposals themselves have borne out the validity of the minimum value. Each of the offer proponents committed to a minimum of \$1 million annual base rent, subject to further negotiation. One of the proponent teams confirmed that its own analysis indicates that the smaller project alternative, although not offered by the developer, is feasible according to the Trust's minimum terms (John Stewart Company et al. 2004). Far from foreclosing the possibility of a "smaller" alternative, the Trust has included the No Infill Alternative (Alternative 3) in the EA, allowing full consideration of any merits and weaknesses, and allowing comparison with the proposed action and other alternatives. Inclusion of the No Infill Alternative also allows its characteristics to inform ongoing lease negotiations and its selection in lieu of the proposed action if warranted.

⁶ See, for example, The Presidio Trust Financial Management Program, Report to Congress (July 8, 1998); 2002 PTMP EIS, Volume III, Appendix J and PTMP Financial Model Assumptions and Documentation Binder (May 2002) at Tab 8; Memorandum dated January 13, 2000 to Presidio Trust Real Estate Committee and Evaluation of Submittals Request for Qualifications Public Health Service Complex (Draft), prepared by Sedway Group (May 28, 1999); February 2003 financial analysis of specified PHSB scenarios prepared by Sedway Group / CBRE Consulting.

Size of the PHS Development and Traffic and Safety Concerns – A number of neighborhood groups, including NAPP, PAR, and the Richmond Presidio Neighbors, and individuals living within the Richmond district and elsewhere stated that the proposed size and scope of the project raises neighborhood traffic and safety concerns, citing parking, congestion, pedestrian safety, and a change in the ambience of the neighborhood. Many felt that 14th and 15th Avenues would not be able to handle the traffic generated, and were apprehensive about potential traffic jams on Lake and California Streets and potential stacking of traffic at the intersections of Lake and California Streets with Park Presidio Boulevard. They suggested that “common sense” dictates that the greater the number of housing units, the greater the number of cars associated with the project. Consequently, they urged the Trust to scale back the size of the development.

Response. In response to these commenters, the Trust has reduced the proposed size (number of housing units) of the largest alternatives by about 10 to 20 percent from the conceptual alternatives the Trust initially proposed at the start of scoping. Alternative 2 has been reduced from 300-390 units to 350 units and Alternative 4 reduced from 300-350 units to 269 units. In addition, the Trust has included the Park Presidio Access Variant to address traffic concerns.

Further, Section 3 of the EA includes a detailed analysis showing objective measures of potential transportation impacts associated with all alternatives, including potential changes in neighborhood traffic and parking. All of the action alternatives would result in fewer daily person trips, fewer daily and peak hour vehicle trips, and less parking demand than the combination of land uses analyzed in the PTMP EIS and included as Alternative 1. Because much of the PHS complex has been vacant for decades, the project, regardless of its size, would likely result in some change to current neighborhood traffic conditions. Without improvements, most of the nearby intersections are expected to operate sluggishly at Level of Service E or F during the morning and evening peak hours due to increases in traffic volumes associated with regional growth trends. Of the action alternatives, Alternative 4 would generate the least number of vehicle trips and therefore result in the least increase in traffic volume and intersection delays related to the project. Alternatives 2 and 3 would add slightly more traffic than Alternative 4, and Alternative 1 would result in the greatest increase in traffic volume and queue lengths at nearby neighborhood intersections.

Planning, NEPA Process, and Public Participation – The Sierra Club, NAPP, PAR, Fort Point and Presidio Historical Association, and others stated that the planning process is flawed because public comment was not sought until options were narrowed to the maximum development proposals. They said that was contrary to the assurances given in the PTMP process that there would be public participation in the development of plans for the individual planning districts.

Response. The Trust is seeking public input through scoping and circulation of this EA, and cannot and will not adopt and implement a proposed action until the environmental review process is complete. No alternatives have been foreclosed, and no decision has been made to pursue “maximum development.” In fact, Table 2 in Section 2, Alternatives, shows that, of the four alternatives being considered, two involve the maximum square footage of 400,000 square feet while two other action alternatives include 275,000

square feet (Alternative 3) and 362,000 square feet (Alternative 4), respectively. In addition, the 400,000-square-foot alternatives have been scaled down to provide fewer units than originally proposed.

Further, the Trust has met its public participation guidelines identified in the PTMP. Pages 130 to 131 of the PTMP state the Trust's commitments to public participation associated with a variety of decisions. For projects involving the potential for major new construction, such as the PHSN project proposal, the Plan calls for public notice, NPS coordination, targeted outreach to interested parties, agency consultation, public scoping, and public review of draft documents such as the draft Planning and Design Guidelines included as Appendix A and this EA. Since announcing the project proposal in April 2003, the Trust has initiated and is pursuing each named step and will continue to meet these requirements.

Providing Alternate Direct Access to the PHSN – The City and County of San Francisco's Department of Parking and Traffic, Richmond neighborhood groups, and numerous residents within the Richmond supported creating a new traffic intersection providing direct access into the Presidio from Highway 1/Park Presidio Boulevard. Some felt the size of the project should not be determined until an analysis of the new traffic access is completed, and others requested that the new intersection be made a condition of the project.

Response. The Trust is exploring the feasibility of a vehicular connection to Park Presidio Boulevard. The new intersection would require installation of a traffic signal, allowing inbound access to the site by cars traveling south on Park Presidio Boulevard, and outbound access from the PHSN district to northbound and southbound Park Presidio Boulevard. Creating this vehicular connection to Park Presidio Boulevard would require support from the City and County of San Francisco and approval and permitting from Caltrans. The new intersection is evaluated as the Park Presidio Access Variant in this EA.

Treatment of the Battery Caulfield Site – The NPS, Golden Gate Audubon Society, NAPP, People for a Golden Gate National Recreation Area, and others suggested that development at Battery Caulfield is inconsistent with the Trust's goals of promoting habitat connectivity and protecting adjacent natural areas, and would result in the disappearance of the California quail from the area. Many recommended that Battery Caulfield be removed from consideration for development, closed as a maintenance yard, and restored to its natural state.

Response. In response to these comments, several alternatives, including the Trust's identified Preferred Alternative (Alternative 2), do not include development at Battery Caulfield; the concept of development on the site continues to be included, however, in Alternative 4. The Trust believes that, although the alternative may not be favored by many members of the public, an alternative that includes development at Battery Caulfield falls within the reasonable range of options left open for consideration in the PTMP. Its inclusion in no way necessitates its selection as the final project, but its thorough analysis will provide valuable information to consider and compare against other alternatives in the PHSN project decision-making process. Issues of habitat connectivity, the quail population, site hydrology, and other natural resources values are addressed in Section 3.

With respect to the final treatment of Battery Caulfield, the present project concerns only rehabilitation and reuse of buildings within the project site. Landscape decisions are part of the project definition only to the extent that they relate to adjacent buildings or their reactivation. For project alternatives that do not involve building at Battery Caulfield, the project proposals assume the status quo land use. Should the Trust ultimately decide to implement the proposed action or another alternative that does not include development at Battery Caulfield, the site would be retained for now in its present use as a maintenance yard. In this event, Battery Caulfield would be available for later planning and development as open space if desired.

Type of Residential Land Use – A number of Richmond neighborhood groups and residents requested that the impacts of different densities of housing and different types of residential use on Presidio open space and the surrounding neighborhoods be evaluated by type of tenant, i.e., senior independent living, senior assisted living, market rate housing, and park-based employee housing.

Response. In response to these comments, Section 3.2, Transportation, includes a discussion of the potential for different housing types and housing populations to result in different impacts.

Incorporating Adequate On-Site Parking – Various neighborhood associations and Richmond district neighbors requested that adequate on-site parking be ensured so that parking does not overflow from the project site into the adjacent neighborhood. They noted that parking presently seems to be at a saturation level in the neighborhood.

Response. In response to these comments, Section 3.2, Transportation, assesses the likely parking demand from each alternative and compares that demand to the proposed supply. The Trust's leasing objective is to create a situation where on-site parking effectively meets on-site demand, but does not exceed the demand to the extent that PHSN district residents are encouraged to own and drive an excessive number of vehicles or surrounding neighbors are encouraged to use the Presidio as an overflow parking resource. Achieving this balance requires careful consideration of the supply and location of parking spaces for the project site.

Treatment of the Historic PHSN – NAPP, PAR, and others requested that the non-historic wings of Building 1801 be removed because they are unsightly and detract from the historic shape and design of the main structure. They noted that during its decades of operation, the hospital complex occupied the maximum square footage of development for only a relatively brief period of time, from approximately the mid-1950s to the mid-1970s.

Response. In response to these comments, the EA includes two alternatives that would remove the non-historic wings of the PHSN (Alternatives 3 and 4), and one alternative that would retain the non-historic wings but remove the one-story loggia or lobby that connects them, revealing the central portion of the historic façade (Alternative 2). In addition, Section 3 of the EA includes a thorough assessment of potential impacts related to historic resources and aesthetic or visual issues. These analyses compare each alternative both to existing site conditions and to the No Action Alternative (Alternative 1), in which the non-historic wings are present.

Providing a Site Interpretation / “No Build” Alternative – California Heritage Council, Fort Point and Presidio Historical Association, and others expressed an interest in participating in the planning for the interpretation of the Nike Missile site, the Marine Hospital Cemetery, and historic buildings located in the PHSB district. These groups also called for inclusion of a “true No Build” alternative.

Response. The Trust welcomes the historic preservation organizations’ interest in and input regarding site interpretation of historic and cultural features within the PHSB district.

Identification of the No Action Alternative (Alternative 1) as one that would implement the adopted management plan for the district with no demolition and no new construction is consistent with NEPA regulations and practice. This issue is further discussed in Section 2. In response to the commenters’ suggestion, the Trust has described “no build” or existing conditions within the descriptions of the Affected Environment in Section 3. With the “no build” baseline described, the reader can understand the difference between the “no build” scenario and the proposed changes under each alternative. A separate “no build” alternative has not also been included because, as described in Section 1, Purpose and Need, maintenance of the PHSB district in its current condition (i.e. a “true No Build” condition) would not conform to Section 110 of the NHPA, which requires federal agencies to take steps to preserve contributing buildings within National Historic Landmarks like the Presidio.

4.2 INTERAGENCY REVIEW

The Trust prepared the PHSB EA concurrently to the fullest extent possible with other applicable environmental reviews or consultation as directed by the Council on Environmental Quality (CEQ) NEPA Regulations (Section 1502.25(a)). To integrate NEPA requirements with other planning and environmental review procedures required by law (or Trust practice), the Trust actively solicited the participation of various agencies, including the National Park Service, the California Department of Transportation, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the City and County of San Francisco. Consultations with these agencies are discussed below. Copies of Trust correspondence with several of the agencies are provided in Appendix D.⁷

4.2.1 National Park Service (NPS)

The Presidio Trust Act, as amended, describes the statutory framework for the relationship between the Trust and the NPS. The NPS manages Area A of the Presidio, including Lomas Creek immediately west of the PHSB district. The NPS is also a signatory party to the Programmatic Agreement (PA) for Area B of the Presidio (see Section 4.2.3 below). To facilitate early coordination with the NPS in the Trust’s NEPA process, Trust staff presented the PHSB project at the NPS bi-weekly Project Review Committee Meeting on September 24, 2003. At the meeting, NPS staff had the opportunity to raise project issues and environmental concerns early in the process. The Trust also toured the project site with interested NPS.

⁷ Copies of all relevant correspondence are available for review as part of the formal public record.

staff on September 8, 2003 and again on November 7, 2003. Trust and NPS staff with expertise in the biological sciences organized a roundtable discussion with interested groups and outside experts on November 25, 2003 to exchange technical information and opinions and to discuss possible ways to minimize potential impacts of the alternatives on natural resources.

The NPS also submitted scoping comments during EA preparation. In general, the NPS expressed support for the project as it “provides the opportunity to arrest the physical deterioration of the buildings, improve the appearance and vitality of the PHS district and contribute toward both the protection of the [NHL] and the important natural values at the site while contributing to the generation of revenues for the long-term operation of the Presidio as required by the Trust Act.” The NPS requested that the EA evaluate project impacts on the surrounding neighborhoods and important wildlife communities and natural habitats within the PHS district. The Trust met with the NPS on January 20, 2004 to review their comments and describe how their comments were given consideration in the EA.

4.2.2 California Department of Transportation (Caltrans)

In a letter dated September 16, 2003, Caltrans responded to the Trust’s request for scoping comments and indicated their desire for a Traffic Impact Study (TIS) with specific components for proposed new access directly to Park Presidio Boulevard, a state highway facility. Section 3 of this EA includes information regarding existing traffic conditions in the site vicinity, as well as a thorough analysis of potential transportation impacts of future project alternatives, both with and without the Park Presidio Access Variant. Project alternatives are assessed in the context of cumulative traffic growth. Technical studies cited in the EA are also available to reviewers.

All activities that involve a need to perform work or implement traffic control measures within a state right-of-way require approval from Caltrans. Construction of the Park Presidio Access Variant would qualify as an activity requiring Caltrans approval. On January 5, 2004, representatives of the Trust and the San Francisco Department of Parking and Traffic (DPT) met with Caltrans staff to discuss the Park Presidio Access Variant and to ask for Caltrans support. Caltrans staff stated that they saw “no fatal flaws” with the proposal, and described the agency’s process for considering improvements of this nature.

4.2.3 Advisory Council on Historic Preservation (ACHP) / California State Historic Preservation Officer (SHPO)

Section 106 of the National Historic Preservation Act (NHPA) of 1966 requires the Trust to take into account the effect of its undertakings on historic and cultural resources, including the NHL. The Trust has entered into a Programmatic Agreement with the ACHP, the SHPO, and the NPS that applies to all undertakings under its jurisdiction. The National Trust for Historic Preservation and the Fort Point and Presidio Historical Association are concurring parties to the PA. The PA provides a framework for reviewing the project effects internally and for consulting with other parties under certain circumstances.

Consistent with the PA and ACHP regulations that suggest early integration of Section 106 compliance with NEPA and other agency processes, in April 2003 the Trust toured the PHSB with ACHP and SHPO representatives and provided copies of the draft Planning and Design Guidelines and other early project information. In September 2003, the Trust requested preliminary comment and early input from the agencies regarding potential alternatives to be evaluated in the EA, the draft Planning and Design Guidelines, or other matters germane to the historic compliance of the undertaking. By the end of the scoping period, neither agency had commented on the project. Concurrent with the issuance of the EA, the Trust in accordance with its PA will submit a "consultation package" to the agencies. It will include public comments received during the public scoping period, the EA, the draft Planning and Design Guidelines (Appendix A), and a request for review and comment pursuant to the PA.

4.2.4 U.S. Environmental Protection Agency (EPA)

The EPA reviewed the PHSB information packet that the Trust distributed at the outset of scoping and recommended that the PHSB project expand wetland features and functions on the upper plateau. One of the PTMP policy goals is to preserve and enhance to the extent feasible the natural and beneficial values of wetlands within the Presidio. Expansion or enhancement of wetland features within the PHSB district are part of ongoing actions and may also be subject to future enhancement projects and proposals. For example, the freshwater wetland north of the PHSB is being restored under the Presidio's Park Stewardship Program that is funded by the Trust. Other ongoing activities include invasive plant removal, planting, seed collection, and wildlife and plant monitoring. These activities are being implemented separately from the proposed PHSB project.

4.2.5 U.S. Fish and Wildlife Service (USFWS)

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the USFWS, to ensure that their actions do not jeopardize the continued existence of endangered and threatened species or result in the destruction or adverse modification of the critical habitat of these species. According to the Recovery Plan for Coastal Plants of the Northern San Francisco Peninsula recently published by the USFWS (August 8, 2003), the only federally endangered listed species within the PHSB district is the San Francisco lessingia (*Lessingia germanorum*), occurring in two areas north of the PHSB. On July 23, 2002, following the conclusion of formal consultation, the USFWS issued its Biological Opinion (BO) on the PTMP. The BO determined that the long-term plan for the Presidio described in the PTMP, with the proposed mitigations, would not likely adversely affect the habitat of this species.

In more recent correspondence with the Trust during PHSB project scoping, the USFWS stated that, where existing buildings would be reused, direct impacts on the San Francisco lessingia appear unlikely, as long as construction vehicles are excluded from its habitat. Based on the review of the proposed development plans, mitigations identified in the BO and the PTMP EIS, and further site-specific analysis and mitigations in this EA, project implementation is not expected to cause any loss of or adverse effects on existing habitat. Furthermore, the project would be confined to previously developed or "disturbed" areas of the PHSB district. In addition, the project scope would be constrained in such a way to ensure no

direct or indirect adverse effects on the San Francisco lessingia during construction or operation. The Trust will continue to implement the appropriate recovery measures in the recovery plan and protection measures in the BO. The project site for PHSB buildings has been defined to exclude San Francisco lessingia locations and habitat. The "Hospital Buffer" reinforces the separation, as does restoring coastal dune grassland or scrub vegetation suitable for the expansion of San Francisco lessingia populations north of the buffer zone. The Trust will continue to coordinate with and provide additional information to the USFWS during project planning and implementation, and will reinstate formal consultation if required.

4.2.6 City and County of San Francisco (CCSF)

The Trust staff met with CCSF Department of Parking and Traffic staff on December 18, 2003. DPT has agreed to work cooperatively with Caltrans and Richmond District neighbors in planning for the potential new access to the project site off Park Presidio Boulevard. DPT has urged the Trust to consider not only the engineering feasibility of this access, but also the issues of cost, Caltrans approval, schedule, and the source of funds for the improvement. Trust staff also consulted with the CCSF's Department of the Environment regarding solid waste generation within the PHSB district.

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List of Acronyms

ACHP	Advisory Council on Historic Preservation
AMA/MP	Archaeological Management Assessment and Monitoring Program
BAAQMD	Bay Area Air Quality Management District
BO	Biological Opinion
BR	bedrooms
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CCSF	City and County of San Francisco
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CHC	California Heritage Council
CO	carbon monoxide
CTBS	Citywide Travel Behavior Survey
dBA	A-weighted decibel
DPT	San Francisco Department of Parking and Traffic
DTSC	California Department of Toxic Substances Control
EA	environmental assessment
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FMP	Financial Management Plan
FY	Fiscal Year
GGNRA	Golden Gate National Recreation Area
GGT	Golden Gate Transit
GMPA	General Management Plan Amendment
gpd	gallons per day
HCM	Highway Capacity Manual
Highway 1	Park Presidio Boulevard
ITE	Institute of Transportation Engineers
kWh	kilowatt-hour
LDA	Letterman Digital Arts Ltd.
LOS	level of service
LSRA	Lake Street Residents Association
MMBtu/hr	million British thermal units per hour
MUNI	San Francisco Municipal Railway

Mw	moment magnitude
NAC	Noise Abatement Criteria
NAPA	National Academy of Public Administration
NAPP	Neighborhood Associations for Presidio Planning
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NHLD	National Historic Landmark District
NHPA	National Historic Preservation Act
NO _x	nitrogen oxides
NPS	National Park Service
OSP	Oceanside Water Pollution Control Plant
PA	Programmatic Agreement
PAHs	polynuclear aromatic hydrocarbons
PAR	Planning Association for the Richmond
PCBs	polychlorinated bipheyls
PG&E	Pacific Gas and Electric Company
PHRA	Pacific Heights Residents Association
PHSH	Public Health Service Hospital
PHSH district	Public Health Service Hospital planning district
PM ₁₀	dust (particulate matter)
PresidiGo	the Presidio's internal sbuttle
Presidio	Presidio of San Francisco
PTMP	Presidio Trust Management Plan
RAP	Remedial Action Plau
RFP	Request for Proposal
RFQ	Request for Qualifications
ROD	Record of Decision
ROG	reactive organic gases
RPN	Richmond Presidio Neighbors
sf	square feet
SFCTA	San Francisco County Transportation Authority
SFFD	San Francisco Fire Department
SFFO	San Francisco Field Office
SFPD	San Francisco Police Department
SFPUC	San Francisco Public Utilities Commission
SFUSD	San Francisco Unified School District
SHPO	California State Historic Preservation Officer
SIP	State Implementation Plan

SRO	single resident occupied
SVOCs	semi-volatile organic compounds
SWPPP	Storm Water Pollution Prevention Plan
TDM	Transportation Demand Management
TIS	Traffic Impact Study
TPH	total petroleum hydrocarbons
USFWS	U.S. Fish and Wildlife Service
USPP	U.S. Park Police
VMP	Vegetation Management Plan

Glossary

This section provides layperson's terms to aid reader understanding rather than technical definitions that may apply in a specialized field of knowledge.

Adverse effect – With respect to historic properties, direct or indirect harm. The National Historic Preservation Act regulations set forth criteria used to assess adverse effect at 36 CFR § 800.9.

Air pollutant – Foreign or natural substances that are discharged, released or over-generated into the atmosphere that could result in adverse effects on humans, animal, vegetation or materials. Also known as an air contaminant. Examples include but are not limited to, smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids or any combination thereof.

Air Quality Management District – Local government agency charged with controlling air pollution and attaining air quality standards. The Presidio is included in the Bay Area Air Quality Management District.

ALS – Advanced Life Support. Functional provision of advanced airway management, including intubation, advanced cardiac monitoring, manual defibrillation, establishment and maintenance of intravenous access, and drug therapy.

Ambient air quality standard – Health- and welfare-based standards established by the state or federal government for clean outdoor air that identify the maximum acceptable average concentrations of air pollutants during a specified period of time.

Ambient noise – The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term “ambient” is used to describe an existing or pre-project condition such as the setting in an environment noise study.

Ambient noise level – The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.

Annual base rent – The annual basic minimum rent once construction has been completed figured in accordance with the use of the property and anticipated economic performance.

Archaeological resource – Any material remains or physical evidence of past human life or activities which are of archeological interest, including the record of the effects of human activities on the environment. An archeological resource is capable of revealing scientific or humanistic information through archeological research.

Area A – The predominately coastal area of the Presidio, comprising about 320 acres, under the jurisdiction and management of the National Park Service.

Area B – The area of the Presidio, comprising about 1,160 acres, under the administrative jurisdiction of the Trust. Area B is defined in Title I of the Trust Act and includes the interior (non-coastal) portion of the Presidio and nearly all built areas of the park.

Area of Potential Effects – The geographic area or areas within which an undertaking could cause changes in the character or use of historic properties, if any such properties exist there. This area always includes the actual site of the undertaking, and could also include other areas where the undertaking will cause changes in land use, traffic patterns, or other aspects that could affect historic properties.

Attainment – Achievement of air quality standards.

Battery Caulfield – See PHSB district.

Best Management Practices (BMPs) – Practices that apply the most current methods and technologies available not only to comply with mandatory environmental regulations, but also maintain a superior level of environmental performance. BMPs may include schedules for activities, prohibitions, maintenance guidelines, and other management practices.

Biological Opinion – A document that includes: (1) the opinion of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service as to whether or not a federal action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of designated critical habitat; (2) a summary of the information on which the opinion is based; and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat.

Carbon monoxide (CO) – A colorless, odorless toxic gas produced by the incomplete combustion of carbon containing substances. It is emitted in the exhaust of gasoline-powered vehicles.

Capital costs (also capital improvements) – Monies spent to rehabilitate, upgrade, or newly construct the built and natural environments, including residential and non-residential buildings, interior improvements, roads, utility systems, water and sewer systems, electrical and telecommunications systems, forests, trail improvements, landscaping, plant restoration and other open space improvements, among other items. Capital costs do not include operating expenses.

Categorical Exclusion – A category of federal actions that does not individually or cumulatively have a significant effect on the human environment for which, therefore, neither an EA nor an EIS is required.

Central Green – A defined open space west of the Wyman Avenue houses and north of Building 1802 (Engineering Building) that serves as a remnant of the 19th century road network within the PHSB district.

Cleanup process – A comprehensive program for the clean-up (remediation) of an environmentally contaminated site. It involves investigation, analysis, development of a cleanup plan and implementation of that plan.

Character-defining features – Visual aspects and physical features that comprise the appearance of a historic building. Character-defining elements include the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment.

CNEL – Community Noise Equivalent Level. The 24-hour average noise level with noise occurring during evening hours (7-10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Conformity – A process mandated in the federal Clean Air Act to insure that federal actions do not impede attainment of the federal health standards. General conformity sets out a process that requires federal agencies to demonstrate that their actions are neutral or beneficial to air quality.

Construction site – The location of construction activity.

Criteria air pollutants – Air pollutants for which the federal or state government has established ambient air quality standards or criteria for outdoor concentration in order to protect public health.

Cultural landscape – The organization and interrelationships of the natural and designed features of a site by use reflecting cultural values and tradition, and changes to those features over time. At the Presidio, this character is inextricably linked to its continuous military occupation since 1776.

Cultural resource – An aspect of a cultural system that is valued by or significantly representative of a culture or that contains significant information about a culture. A cultural resource can be a tangible entity or a cultural practice. Tangible entities at the Presidio include archaeological resources, cultural landscapes and historic structures.

Cumulative effects – The estimated combined effects that are a result of the impacts of an action, when added to other past, present, and reasonably foreseeable future actions, regardless of the agency (federal or nonfederal) or person to undertake such actions.

dB or dBA – A decibel is the standard unit of sound amplitude, or loudness; decibels are measured on a logarithmic (i.e., non-linear) scale. The A-weighted scale is adjusted for human sensitivity. For decibels, each increase in 10 dB multiplies the previous value by 10; for example, 50 dBA is 10 times louder than 40 dBA, while 60 dBA is 100 times louder than 40 dBA.

Development agreement – A contract between a private development partner and a government entity such as the Trust that may specify conditions, terms, restrictions, and regulations pertaining to all aspects of a development.

Direct effect – An impact that occurs as a result of the proposed action or alternative in the same place and at the same time as the action.

Diversion – For waste measurement purposes, diversion is any combination of waste prevention (source reduction), recycling, reuse and composting activities that reduces waste disposed at permitted landfills and transformation facilities.

Emergency medical services (EMS) – The provision of treatment to patients that occurs prior to arrival at a hospital or other health care facility.

Endangered species – A listed species in danger of extinction throughout all or a significant portion of its range.

Environmental Assessment (EA) – A concise public document that analyzes the environmental impacts of a proposed federal action and provides sufficient evidence to determine the level of significance of the impacts.

Environmental Impact Statement (EIS) – A detailed NEPA document prepared when a proposed action or alternative has the potential for significant impact on the human environment.

Environmental review – See NEPA process.

Exceedance – A monitored level of concentration of any air contaminant higher than national or state ambient air quality standards.

External trip – A trip that originates outside the Presidio and terminates in the Presidio, or originates in the Presidio and terminates outside the Presidio.

Federal Register – A daily publication of the National Archives and Records Administration that updates the Code of Federal Regulations, in which the public may review the regulations and legal notices issued by federal agencies.

Financial Management Program – A long-range projection required by the Trust Act to be submitted to Congress setting forth an annual schedule of decreasing federal funding that will achieve self-sufficiency for the Trust by 2013.

Financial sustainability – The long-term aspect of financial self-sufficiency. The premise that the Presidio must not only meet short-term self-sufficiency requirements in fiscal year 2013, but also be capable of sustaining its operations, performing the necessary building- and infrastructure-related capital improvements, and funding replacement reserves in perpetuity. This requires generating sufficient revenues from leasing and other activities to cover these long-term costs.

Finding of No Significant Impact (FONSI) – A public document that briefly describes why an action would not have a significant effect on the human environment and, therefore, will not require preparation of an EIS.

Fire flows – Water flows available for fighting fires. Fire flows at the Presidio can be deficient due to undersized water mains, bottlenecks created by pressure release valves or water meters, unusable piping or spacing of fire hydrants farther apart than permitted by the Uniform Fire Code.

Fugitive dust – Dust particles that are introduced into the air through certain activities, such as excavation and site preparation during construction or some demolition activities, off-road vehicles, or any vehicles operating on open fields or dirt roadways.

General Management Plan Amendment (GMPA) – The NPS' management plan for Area A of the Presidio.

General Objectives of the GMPA – A directive of Congress incorporated into the Trust Act with which the Trust must comply. Because the GMPA text does not explicitly identify general objectives, the Trust Board determined and adopted the General Objectives of the GMPA in Trust Board Resolution 99-11. The General Objectives guide Trust policy and decisions about resource protection and land and building use in Area B of the Presidio.

Generation – The total amount of waste produced by a jurisdiction.

Geologic hazards – Natural geologic processes (i.e., earthquakes) that occur or could potentially occur in locations that present a threat to humans or developed areas.

Green design – Design and construction practices that significantly reduce or eliminate the potential negative influence of buildings on its occupants and the environment.

Ground lease – The right to use a land parcel for a definite length of time by a tenant who invests the necessary capital to develop and construct improvements (e.g., buildings) on the site.

Ground rent – The rent paid for the use of land under the terms of a ground lease.

Groundwater – Subsurface water that occurs beneath the water table in soils and geologic formations that are fully saturated. Also see Surface water.

Guaranteed ride home program – A program that assures an employee not arriving in his or her personal vehicle of a trip home. For example, an employee may have to work later than the departure time of his carpool or the last bus to his destination. The program would then provide the employee with a ride home in a company vehicle, subsidized taxicab or similar type vehicle.

Habitat – Home for a plant or animal.

Habitat restoration – Returning the quantity and quality of habitat to some previous naturally occurring condition, most often some baseline considered suitable and sufficient to support self-sustaining populations of fish and wildlife.

Hazardous – Substances that are potentially harmful to human health or the environment.

Hazardous wastes – A compound or compounds remaining for disposal or reclamation after use or after release to the environment.

Historic property – Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. The term includes artifacts, records, and remains that are related to and located in such properties. The term “eligible for inclusion in the National Register” includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria.

Historic views – Those views and view corridors that existed at the Presidio during its period of significance.

Hospital Buffer – A 50- to 75-foot vegetated area on the south-facing dune slope behind the PHSB complex that will be managed to minimize potential conflicts between Building 1801 operations and adjacent San Francisco lessingia populations on the upper plateau consistent with the USFWS Recovery Plan for the listed species.

Impact topics – Specific natural, cultural or socioeconomic resources that would be affected by the proposed action or alternatives (including no action). The magnitude, duration and timing of the effect to each of these resources are evaluated in the Environmental Consequences section of an EA or EIS.

Indirect effect or impact – Reasonably foreseeable impacts removed in time or place from the proposed action. These are “downstream” impacts, future impacts, or the impacts of reasonably expected connected actions (i.e., growth of an area after a highway to it is complete).

Infill construction – New construction that is located within an existing developed area, such as a building complex. Infill construction refers to new development within developable areas.

Infiltration – The downward entry of water into the surface of the soil.

Internal trip – A trip that both originates and terminates in the Presidio.

Interpretation – The telling of a park’s “story” through programs and activities.

Landfill – A waste management unit at which waste is discharged in or on land for disposal.

Landscape vegetation – Plant material, usually ornamental trees, shrubs, grass and plants growing around buildings or grounds that has been planted to beautify the site or for a utilitarian purpose such as screening a view.

Lateral spreading – A phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

L_{dn} – A day-night average noise level, a 24-hour average L_{eq} ; it takes into account the greater annoyance of nighttime noise with a 10 dBA “penalty” added during the hours of 10:00 p.m. to 7:00 a.m.

Lead agency – The agency either preparing or taking primary responsibility for preparing the NEPA document.

Lease agreement – A written contract between a landlord and a tenant that transfers the right to exclusive possession and use of the landlord’s real property to the tenant for a specified period of time and for a stated rent.

LEED (Leadership in Energy and Environmental Design) Green Building Rating System – A voluntary, consensus-based national standard for developing high-performance, sustainable buildings.

L_{eq} – The equivalent steady-state sound level is the average acoustic energy content of noise for a stated period of time. The L_{eq} of two different time-varying noise events are the same if the events deliver the same acoustic energy to the ear during exposure, no matter what time of the day or night they occur, unlike some other measurements that adjust for differences in noise sensitivity at night.

Level of Service (LOS) – A qualitative measure describing operational conditions within a traffic stream, based on service measures such as delay, speed and travel time.

Liquefaction – A phenomenon in which saturated, cohesionless soil experiences a temporary loss of strength due to the buildup of excess pore water pressure, especially during cyclic loading such as that induced by earthquakes. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand and silt of low plasticity that is relatively free of clay.

Listed species – Any species of fish, wildlife or plant which has been determined to be endangered or threatened under the Endangered Species Act.

Lower plateau – See PHSB district.

Maximum load point – The location along a bus route at which the highest level of ridership typically occurs.

Migratory species – Species that move substantial distances to satisfy one or more biological needs, most often to reproduce or escape intolerable cyclic environmental conditions.

Mitigation – A method or measure that, if implemented, would lessen the intensity of an impact on a particular resource.

Modal split – The proportion of trips made by various travel modes, including automobile, transit, bicycle, foot, and other modes.

Moment magnitude – An energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directly related to average slip and fault rupture area.

Mutual aid – Reciprocal assistance by different jurisdictions (e.g., local, state, federal) of emergency services under a prearranged plan.

National Environmental Policy Act (NEPA) – Federal legislation enacted in 1972 that establishes the environmental policy that federal entities must take environmental considerations into account in making decisions about federal policies, plans, programs, and projects.

National Historic Landmark (NHL) – A nationally significant historic place designated by the Secretary of the Interior because it possesses exceptional value or quality in illustrating or interpreting the heritage of the United States. The Presidio was designated an NHL district in 1962.

National Historic Preservation Act (NHPA) – The basic legislation of the national historic preservation program that established the Advisory Council on Historic Preservation and the Section 106 review process.

Native plant communities – A group of plants growing together that are comprised primarily of native plants and that were most likely found on that particular site prior to European settlement.

NEPA process – The objective analysis of a proposed action to determine the significance of its environmental impacts on the human environment; consideration of alternatives and mitigation to reduce potential impacts; and presentation of the analysis to the interested and affected public for review and comment. NEPA process may also be referred to generally as environmental review.

Nike Swale – See PHS district and swale.

Nitrogen oxides (NO_x) – Gases formed in great part from atmospheric nitrogen and oxygen and oxygen when combustion takes place under conditions of high temperature and high pressure; NO_x is a criteria air pollutant.

No action alternative – Under NEPA, a benchmark against which action alternatives are compared.

Noise – Unwanted sound.

Nonnative plants – Plant species that have been introduced (or have invaded through natural dispersal from a site where they were introduced) and did not occur on that site prior to European settlement. Even though a plant grows as a native species in a nearby location, if habitat for that species does not occur on the site and if it did not occur there as part of a native plant community, it is considered to be non-native. (For example, coast redwood occurs naturally within the Bay Area, but it is considered non-native to the Presidio.)

Park – The term is used interchangeably in this document with the “Presidio.”

Period of significance – A defined period of time during which a property established its historical association, meaning, or value.

Person trip – A trip to or from the project made by one person in any mode of transportation: automobile, bus, transit, walking or bicycle.

Private development partner(s) – A private organization or group of organizations who are responsible over an extended period of time to bring about the comprehensive redevelopment of an entire project site.

Public Health Service Hospital district – One of seven planning districts within the Presidio as established under the PTMP. The PHS district contains approximately 400,000 square feet of buildings, including the PHS (Building 1801) and nearby dormitories, offices, residences, and recreational buildings. The southern, more developed portion of the 42-acre district is sometimes referred to as the “lower plateau” and its collection of buildings as the “PHS complex.” The northern portion of the district or “upper plateau” includes the previously disturbed “Battery Caulfield” (or “Nike Missile”) site and remnant natural habitats, including the “Nike Swale” area.

Predicted noise level(s) – Future noise levels, resulting from predictable natural and mechanical sources and human activity including the project.

Presidio Trust – A federal government corporation created by Congress in 1996 to preserve and enhance the Presidio, a national park site, in cooperation with the NPS. As mandated by the Trust Act (16 USC §§ 460bb appendix, as amended), the Trust must manage the park to become financially self-sufficient by 2013. The Trust has authority to lease property in order to generate revenues needed to operate the park and undertake capital improvements.

Presidio Trust Management Plan – The Presidio Trust’s comprehensive plan adopted in August 2002 that guides future management and implementation of projects within Area B of the Presidio. The PTMP was developed with broad public involvement.

Programmatic Agreement – A document that records the terms and conditions which have been agreed upon to resolve the adverse effects of an undertaking upon historic properties.

Quail Commons – A 1.5-acre habitat restoration site sandwiched between the southern row of West Washington Boulevard housing and Battery Caulfield that serves as a nesting area and winter covey feeding area for the California quail.

Receptors – Locations selected for determining noise or air quality impacts. These locations represent areas where frequent human use occurs, or is likely to occur in the foreseeable future.

Record of Decision (ROD) – A written public record identifying a selected course of action and explaining why the lead agency has chosen a particular course of action.

Recovery Plan – A public document prepared by the USFWS that outlines tasks necessary to stabilize and recover listed species. Recovery plans include goals for measuring species progress towards recovery, estimated costs and time frames for the recovery process, and an identification of public and private partners that can contribute to implementation of the recovery plan.

Reeyeled water – The reclamation and reuse of wastewater for beneficial use.

Reeycling – The process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products that meet the quality standards necessary to be used in the marketplace.

Rehabilitation – The act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Remedial Action Plan (RAP) – A written public record identifying a cleanup plan for a site contaminated with hazardous wastes and explaining why the agency has chosen the particular cleanup plan.

Remediation – Cleanup of a site to levels determined to be health-protective for its intended use.

Replacement construction – Construction of new buildings that are intended to replace specific buildings that have been or will be demolished.

Request for Qualifications (RFQ) / Request for Proposals (RFP) selection process – A competitive leasing process with a defined set of selection criteria and stated time period generally consisting of an RFQ, RFP and Negotiation. The Trust is using this process for the PHSB to identify a qualified private development partner with whom to negotiate the terms and configuration of a final project and to implement the project.

Response time – The time that begins when emergency response vehicles are en route to an emergency incident and ends when these vehicles arrive at the scene.

Revenues – The total income produced or generated by a given source. At the Presidio, these revenue sources include non-residential and residential buildings (building leases and ground leases), government appropriations, Treasury borrowing, utilities and telecommunications revenues, parking fees, permit and salvage operations, special events, and other miscellaneous parkwide revenues.

Scope – The types of actions to be included in a project, the range of alternatives, and the impacts to be considered.

Scoping – The process by which an agency solicits input from the public and interested agencies on the nature and extent of issues, impacts, and alternatives to be addressed in an environmental review document under the NEPA.

Section 7 – The section of the Endangered Species Act that outlines procedures for interagency consultation to conserve federally listed species and designated critical habitats.

Section 106 – The section of the NHPA that requires federal agencies to consider the effects of their actions on historic properties and seek comments from an independent reviewing agency, the Advisory Council on Historic Preservation. The purpose of Section 106 is to avoid unnecessary harm to historic properties.

Section 110 – The section of the NHPA that sets out the broad historic preservation responsibilities of federal agencies to ensure historic preservation is fully integrated into ongoing programs.

Seismically-induced densification – A phenomenon in which non-saturated, cohesionless soil is compacted by earthquake vibrations, causing differential settlement.

Self-sufficiency – The requirement, mandated by the U.S. Congress, that the Trust generate sufficient revenues at the Presidio to support Area B operations without continuing federal appropriations, beginning in Fiscal Year 2013 and every year thereafter. Self-sufficiency has both a short-term and long-term aspect. See also Financial Sustainability.

Solid waste – Any non-hazardous garbage, refuse or sludge, which is primarily solid, but could also include portions of liquid, semi-solid or contained gaseous material resulting from residential, industrial, commercial, agricultural, mining operations, and community activities.

Special-status species – Plants and animals with limited numbers or distribution that have special legal and policy protection. They are protected under federal and state Endangered Species Acts or other regulation, or are sufficiently rare to either be candidates or under consideration for such designation.

State Historic Preservation Officer – The official in each state who (among other duties) consults with federal agencies during Section 106 review. The SHPO administers the national historic preservation program at the state level, reviews National Register nominations, and maintains file data on historic properties that have been identified but not yet nominated. Agencies seek the views of the appropriate SHPO(s) while identifying historic properties and assessing effects of an undertaking on historic properties.

State Implementation Plan – U.S. EPA-approved state plans for attaining and maintaining federal air quality standards.

Storm water – Storm water runoff and surface runoff and drainage.

Storm Water Pollution Prevention Plan – A set of protocols developed and implemented to address specific storm water discharge concerns, and often developed for construction sites.

Surface water – Water that naturally flows or settles on top of natural landforms and vegetation, often as freshwater rivers, streams and lakes.

Sustainability – A concept that recognizes that development should meet the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable design – Design that applies the principles of ecology, economics, and ethics to the business of creating necessary and appropriate places for people to visit, live, and work. Development that has been sustainably designed sits lightly upon the land, demonstrates resource efficiency, and promotes ecological restoration and integrity, thus improving the environment, the economy, and society.

Swale – A low-point in natural topography, which often provides a point of collection and infiltration for ground and surface water flows, as in the Nike Swale.

Threshold of hearing – The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.

Tiering – The coverage of general matters in broad EISs with subsequent narrower EISs or EAs incorporating by reference the general discussions and concentrating solely on the issues specific to the subsequent project-specific action.

Toxic Air Contaminant (TAC) – An air pollutant, identified in regulation by the California Air Resources Board, that could cause or contribute to an increase in deaths or in serious illness, or could pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code § 39650 et seq.) from pollutants subject to California Ambient Air Quality Standards. Health effects due to TACs can occur at extremely low levels. It is typically difficult to identify levels of exposure that do not produce adverse health effects.

Transportation Demand Management (TDM) – Strategies designed to maximize the people-moving capability of the transportation system by increasing the number of persons in a vehicle, or by influencing the mode of, time of, or need to, travel. To accomplish these types of changes, TDM programs must rely on incentives or disincentives to make these shifts in behavior attractive.

Trip generation rate – A rate or number that expresses the number of person trips that would be generated by a unit (e.g., square foot or dwelling unit) of a given land use type.

Trust Act – The act that establishes the Trust as a federal government corporation and authorizes the Trust to manage in accordance with the terms of the Act a majority of the Presidio's land area.

Undertaking – Under NHPA, a federal activity that is subject to Section 106 requirements. The term is intended to include any project, activity, or program, and any of its elements, that has the potential to have an affect on an historic property and that is under the direct or indirect jurisdiction of a federal agency or is licensed or assisted by a federal agency.

Upper plateau – See PHSB district.

Vehicle trip – A trip to or from the project made by a transportation vehicle, primarily automobile. Equal to the number of person-trips made by automobile divided by the average numbers of persons per automobile.

Viewshed – The geographic area from which a site is visible, a collection of viewpoints.

Visitor carrying capacity – The type and level of visitor use that can be accommodated while sustaining the desired resource and visitor experience conditions.

Visitor experience – The perceptions, feelings, and reactions a person has while visiting a park.

Waste stream – Waste material output of a community, region, or state.

Watershed – An area of land that drains or sheds its rainwater and springs into a body of water such as a stream or lake.

Wetlands – Areas that are inundated by surface or ground water at a frequency and duration sufficient to support, under normal circumstances, vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs and similar areas.

Appendices

Appendix A

Draft Planning and Design Guidelines



Draft Planning and Design Guidelines

Public Health Service Hospital District

February 2004

Draft Planning and Design Guidelines

Public Health Service Hospital District

	PAGE
I. INTRODUCTION AND PURPOSE	1
A. Purpose of the Document	2
II. SETTING	3
A. National Park in an Urban Setting	3
B. Natural Landscape	3
C. National Historic Landmark District	4
D. The Landscape of the PHS Hospital Complex	10
E. The Architecture of the PHS Hospital Complex	14
III. PLANNING AND DESIGN GUIDELINES	17
A. Introduction	17
B. Spatial Organization, Open Space, and Views	18
C. Historic Preservation Considerations	20
D. Replacement Construction	22
E. Landscape Design	24
F. Natural Resource Protection	26
G. Circulation and Parking	29
H. Public Access	31
I. Environmental Sustainability	35
IV. ISSUES FOR FURTHER CONSIDERATION	37
A. Environmental Remediation	37
B. Additional Assessment of Historic Building and Cultural Landscapes	37
C. Pedestrian and Bicycle Trails	38
V. RESOURCES	39

(cover photo: PHS Hospital, c. 1953, Park Archive and Record Center Photo Collection, Golden Gate National Recreation Area)

Draft Planning and Design Guidelines

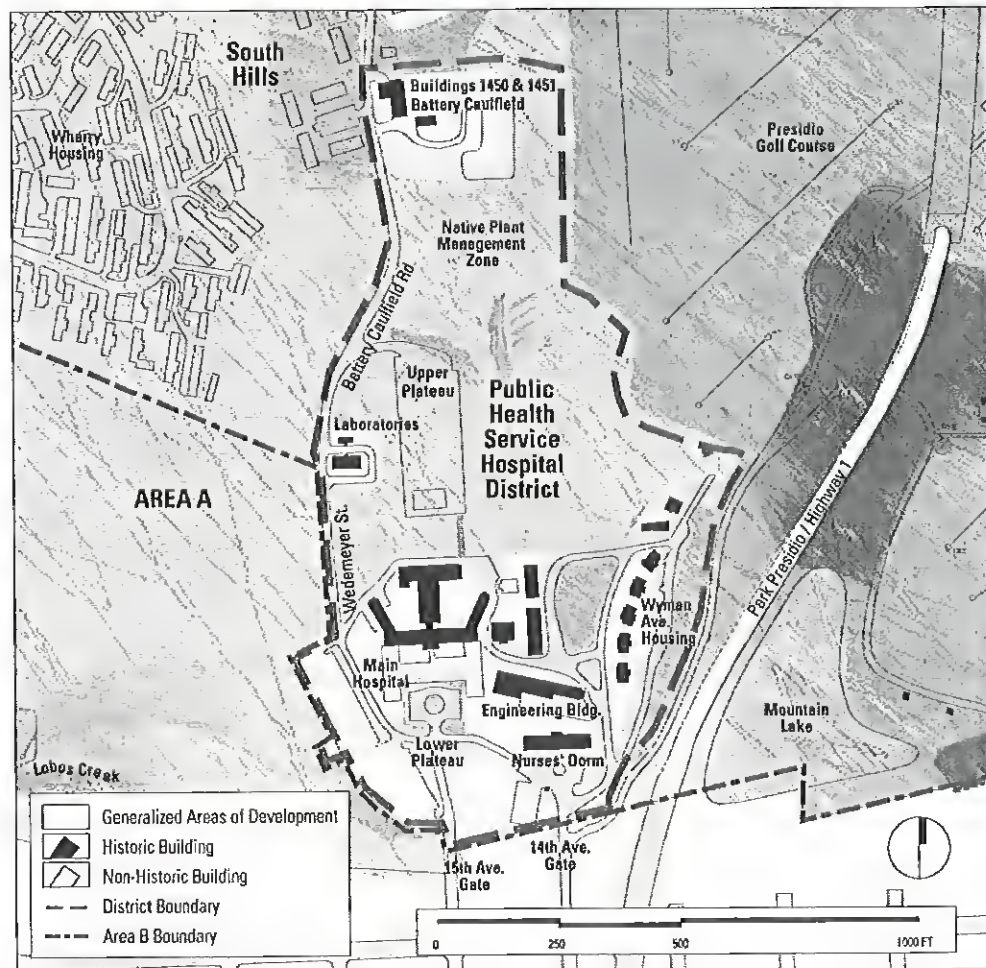
Public Health Service Hospital District

LIST OF FIGURES	PAGE
Figure 1: Open Spaces and Views	19
Figure 2: Historic Structures and Resources	21
Figure 3: Height Limits and Development Boundaries	23
Figure 4: Cultural Landscape Features in the PHSB Complex	25
Figure 5: Vegetation and Natural Resources	27
Figure 6: Circulation and Parking	30
Figure 7: Public Access	32

I. Introduction and Purpose

Surrounded by important natural resources and adjacent to a vibrant city, the Public Health Service Hospital district offers great opportunities for working, living, sightseeing, hiking, biking, recreation, and education. It also presents the challenge of integrating new uses into a sensitive and historic surrounding.

The district encompasses approximately 42 acres and 400,000 square feet of building space in the south-west corner of the Presidio. It consists of two distinct areas. The lower area contains the former Public Health Service Hospital complex, a group of 17 buildings and landscapes all related to the hospital function. The upper area is Battery Caulfield, a former Nike Missile site that includes below-ground structures and several acres of asphalt. The largest building in the district, the Public Health Service Hospital (Building 1801) consists of a 1932 historic structure of 174,000 sf and 1952 non-historic additions to the front and rear which total 125,000 sf. There are seven historic residences within the hospital complex, four of which are duplexes totaling 24,000 sf. Nine other buildings, including dormitories and offices, complete the campus and total an additional 74,000 square feet.



PHSH DISTRICT PROJECT BOUNDARY
source: PTMP

The PHSB complex sits on a raised plateau, known as the lower plateau, overlooking San Francisco neighborhoods and hills to the south, Mountain Lake to the east, and Lobos Creek Valley and the ocean to the west. Rising steeply behind the main hospital building is another plateau, known as the upper plateau, which consists primarily of native vegetation including the endangered plant species, San Francisco *Lessingia*.

North of the upper plateau sits Battery Caulfield, formerly a Nike Missile facility, constructed by the Army in 1953. Battery Caulfield has the visual character of an industrial site and consists of two flat terraces formed out of a natural plateau, with paving covering most of its approximately 3-acre site. All that is visible of this facility are paved areas with steel doors set in the concrete pavement. Below these doors are underground storage magazines, measuring 40 by 60 feet.

Adjacent to Battery Caulfield is the historic radio transmitter building (Building 1450) and the historic generator building (Building 1451). Both were constructed during World War II to serve the coastal defense batteries. During the deployment of the Nike missile site, from 1953 until 1974, these two buildings were used to provide office space, quarters, maintenance and storage functions to support the missile operation. They are now used for office and storage space. Building 1451 will be used by the Trust in the future to house telecommunications equipment and is not included in this offering.

A. PURPOSE OF THE DOCUMENT

The draft Planning and Design Guidelines provide a framework for new use of the Public Health Service Hospital district.

The purpose of the Guidelines is to reiterate and explain the planning principles and district guidelines presented in the Presidio Trust Management Plan (PTMP), and to develop them to provide more specific guidance to the design and development team selected for the reuse of the site. The Guidelines will also be used by Trust staff to review project submittals, and when final, to review proposed work. The general public may use the draft, and later the final Guidelines, as an indicator of planning and design intent for the area.

The Guidelines cover a wide array of physical planning opportunities and issues present in the PHSB district, from scenic views to transportation, from building design to habitat preservation.

These Guidelines are presented here as a draft, and will be finalized as part of the development agreement after considering public comment and consultation with the historic preservation agencies.

II. Setting

A. NATIONAL PARK SITE IN AN URBAN SETTING

The Presidio of San Francisco is a unit of the Golden Gate National Recreation Area. As such, the Presidio attracts local, national, and international visitors who take advantage of interpretive programs and exhibits and visit the historic military sites, as well as visitors who enjoy the natural resources and scenery. The Presidio also contains almost six million square feet of building space, much of it vacant. The Presidio Trust Management Plan, adopted in August 2002, describes how building space will be used and states that the Presidio will remain an open space haven with its natural, historic, scenic, cultural, and recreational resources preserved for public use and enjoyment.

B. NATURAL LANDSCAPE

The Presidio is one of the few places on the San Francisco peninsula where significant traces of the area's original ecology persist. Geological, hydrologic, climatic, and ecological forces created the physical conditions that the Presidio's first inhabitants found, and they continue to shape the Presidio. Understanding and acknowledging these factors in the on going use and transformation of the landscape is critical.

Part of the Presidio Trust's mandate is to preserve, protect, and enhance the park's natural and cultural resources for the benefit of the public. The Public Health Services Hospital district includes important natural features that contribute to the Presidio's uniqueness and that must be protected.

The Presidio Trust and National Park Service have jointly developed a guiding document, called the Vegetation Management Plan (VMP) for the Presidio. It provides a management framework for protecting, enhancing, restoring and rehabilitating the native and planted vegetation of the Presidio. This includes rehabilitation of the historic forest and landscape management zones, and outlines objectives and actions for native plant and ecological restoration sites. Most of the vegetation types identified in the VMP are present within or adjacent to the Public Health Service Hospital district, and their future treatment will be guided by the VMP.

Character-defining Features of the Natural Landscape

Topography and Soils

The site occupies a promontory ridge that separates Mountain Lake and Lobos Creek. Much of the site slopes toward Lake Street; the grade change across the site from north to south is approximately one hundred feet. Before it was developed, the area consisted of dunes; soils are sandy and prone to erosion.

Drainage

The PHSB complex is located at an extremely sensitive point in the Lobos Creek Watershed. Its west side drains into Lobos Creek, the source of the Presidio's drinking water, and its east side drains into Mountain Lake, one of only two natural lakes in San Francisco. Protecting the quality of water draining into the lake and the creek is essential. Below the slope upon which Battery Caulfield sits, there is a seep which drains into seasonal wetlands known as the Nike Swale.

Vegetation

The upper plateau supports significant native plant communities and wildlife habitat that include coast live oaks, grasses, and perennial and woody dune scrub vegetation. Within this area, places where the ground surface has been disturbed support the San Francisco *Lessingia* (*Lessingia germanorum*), an endangered species.

Non-native plant species on the site include iceplant, mixed dune slack vegetation, non-native grasses, a strip of Monterey Pine immediately north of the hospital, and a strip of Blue Gum Eucalyptus to the east of the *Lessingia* area.

Seasonal wetland plants are found at the Nike Swale.

Wildlife

The availability of water, together with woodland, riparian scrub, and wetland plants provide habitat for a diversity of wildlife. Quail Commons, a 1.5 acre site north of Battery Caulfield, is a nesting and winter covey feeding area. Battery Caulfield serves as a corridor for nesting and foraging quail, and the area south of it, known as the upper plateau, is one of the most valuable bird habitats in the Presidio.

C. NATIONAL HISTORIC LANDMARK DISTRICT

A National Historical Landmark is a property of national historical significance as designated by the Secretary of the Interior under the authority of the Historic Sites Act of 1935. The Presidio of San Francisco was designated as a National Historic Landmark in 1962, with an updated designation in 1993.

The updated designation defines the Presidio's "period of significance" as 1776 to 1945. When considering the built environment, buildings and features are considered to be historic if they were constructed during the period of significance and they have retained their historic integrity. Of the Presidio's approximately 850 buildings, 470 are historic and are classified as "contributing features" to the Landmark district. The PHSB complex is part of the district and contains 16 contributing historic structures. Its period of significance is from 1875, when the original Marine Hospital was established, to 1945. However, an historic district such as the Presidio consists of more than just individual historic buildings. It also includes contributing archeological resources, road corridors, and site structures. Within the PHSB district, there is one known archeological resource, the former Marine Cemetery, on the plateau north of the hospital buildings. There are also three predicted resources: a remnant of the Lobos Creek water control system,

known as the the Hottaling Tunnel, which once connected Mountain Lake to Lobos Creek; remnants from the 19th-century era hospital and possible farm sites which occupied the site prior to the hospital; and the area surrounding Mountain Lake, which has high potential for prehistoric archaeology sites.

The Public Health Service Hospital itself was not included in the 1962 landmark district. It was added in the 1993 National Register of Historic Places Registration Form update. The 1993 update states the foundation for its inclusion in the landmark district:

"The definable areas of the Presidio's Historic landscape and the range and diversity of resources within it are not limited to developments associated with the early Spanish-Mexican occupation and with the myriad of military activities of the United States Army: other federal and civilian entities have shared portions of the reservation. " [Section 8, page 8-4, paragraph 2]

It goes on to identify the Public Health Service Hospital, the Coast Guard station on Crissy Field, the golf course, and the Panama-Pacific International Exposition as some of the non-military places or buildings that exist or have existed within the Presidio throughout its history.

The update then explains the PHS's association with the Presidio and the reason for being part of the historic district:

"The history of the Marine Hospital and Presidio are intertwined both in the development of reservation lands and in the provision of services to the community. As a civilian facility, the Marine Hospital provided free medical care, both short-term and convalescent, to merchant marines. The longstanding presence of the hospital on the reservation enriches the function and role of the Presidio in the historic development of San Francisco and the Bay Area." [Section 8, pg 8-32, par. 2.]

The PHS district contains many historic buildings which contribute to the Presidio's landmark status. Of the 17 PHS complex buildings all but one structure (Building 1803) and two additions (to Buildings 1801 & 1802) are listed on the National Register. Battery Caulfield, developed during the Cold War, has been determined to have no historical significance. This determination is due to the extensive changes that have been made to the Nike Missiles structures in the years since their deployment. Adjacent to Battery Caulfield is the historic radio transmitter building (Building 1450) and the historic generator building (Building 1451). Both buildings were constructed during World War II to serve the coastal defense batteries, and both utilitarian concrete buildings are listed as contributing to the National Landmark District.

Evolution of the Hospital Complex

The Marine Hospital Service, operating under the Department of the Treasury, was established in 1798 to provide free care for the world's merchant seamen coming ashore at America's growing and busy ports. The first Marine Hospital in San Francisco was built in 1850 and was located at Harrison and Spear Streets on what was then Rincon Hill. It was damaged in an earthquake in 1868, and a location for a new hospital complex was



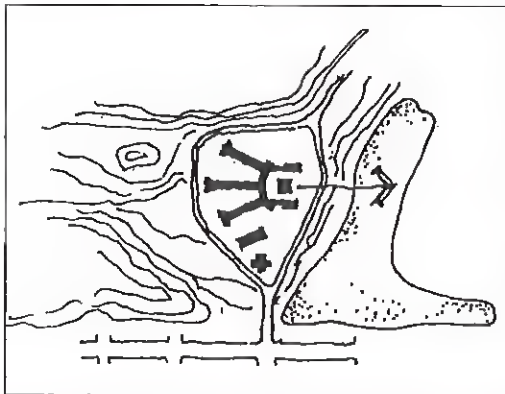
ORIGINAL US MARINE HOSPITAL IN SAN FRANCISCO AT SPEAR AND HARRISON STREETS, CONSTRUCTED IN 1850
source: National Library of Medicine

selected within the boundaries of the Presidio military reservation adjacent to Mountain Lake. The Army leased 85 acres along its southern edge on the east and west sides of Mountain Lake to the U.S. Treasury for the new marine hospital site.

By 1875, the Marine Hospital complex was completed. It consisted of one- and two-story wood frame buildings creating a small complex on the west bank of Mountain Lake, facing east toward San Francisco. Initially, its three long hospital wards were laid out in a radial pattern behind a small group of administrative buildings.

New buildings were continually added. In 1912, the Service was reorganized and renamed the U.S. Public Health Service (USPHS), to reflect its emerging role as the Federal guardian of public health. The Public Health Service presence in San Francisco is of national significance as the birthplace of epidemiology and the first use of a laboratory and scientific method to determine the existence and prevention of disease (during the period 1900 to 1907).

A Hygiene Laboratory was established during this period at the hospital complex to aid researchers and public health officials in combatting serious health risks. By the late 1920's, it was determined that the hospital complex was inadequate to serve the needs of a modern hospital, and planning began for the construction of a new, bigger hospital on the site. Before the USPHS was willing to allocate money to new construction, however, it wanted a more permanent title to the land. Terms were renegotiated with the Army in 1927 to assign the land to the USPHS in a formal transfer, which included a reverter



US MARINE HOSPITAL SITE PLAN, CIRCA 1875, ORIENTED EAST, FACING MOUNTAIN LAKE
source: Presidio Trust

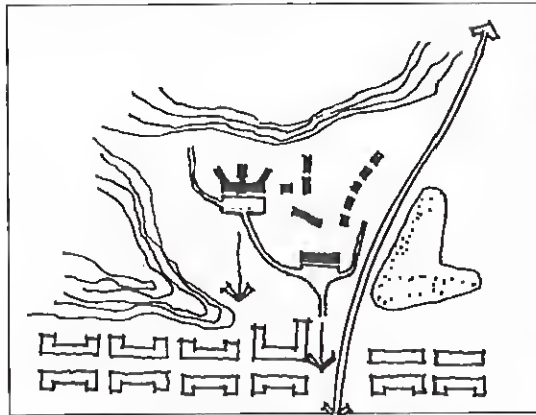


AERIAL PHOTO OF US MARINE HOSPITAL TAKEN IN THE LATE 1920S
source: Park Archive and Record Center Photo Collection
Golden Gate National Recreation Area

clause giving the Army the right to reclaim the land whenever it ceased to be used for the Marine Hospital. This land assignment reduced the size of the parcel from 85 to 35 acres.

In 1928, plans were completed for the new 472-bed hospital. The old wooden structures had to be kept in use until the new structures were complete, therefore the main hospital building was located on open land west of the original hospital structure. After the new buildings were completed most of the older structures were demolished.

The new hospital building faced south, towards the city. The change in orientation away from Mountain Lake can be explained by the fact that San Francisco had grown considerably since the 1875 hospital was planned, so that now a new urban residential neighborhood adjoined the site's southern boundary. The 1932 main hospital contrasted greatly with the modest frame structures that it had replaced. The new buildings



THE 1932 SITE LAYOUT ORIENTED THE COMPLEX TOWARDS THE CITY NEIGHBORHOODS TO ITS SOUTH
source: Presidio Trust

reflected the expanded role of the federal agency whose mission it was to guard public health, and also conformed to contemporary trends, when government buildings reflected public and civic aspirations. The period from 1922 to 1936 is considered by the Public Health Service to be its most significant historical period is the development of health issues in the United States.

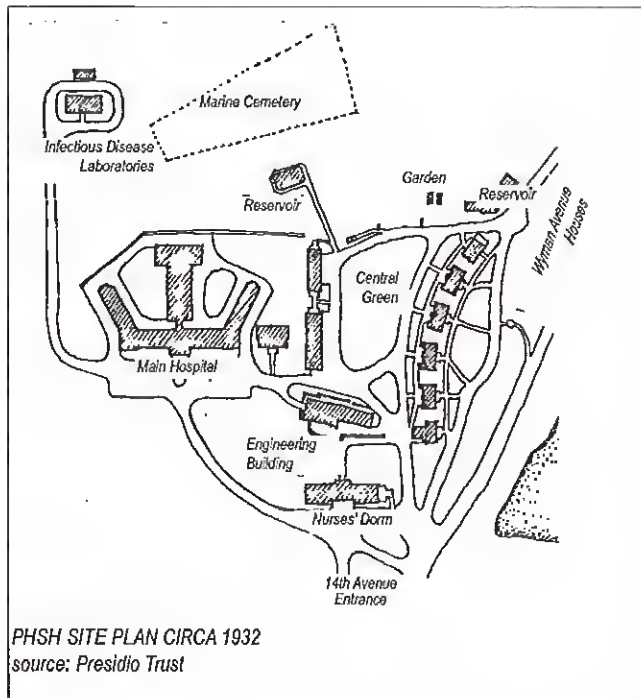
Little is known about the architecture firm that designed the complex. The work was undertaken by the Treasury Department under the direction of its Acting Supervising Architect, James Wetmore, who oversaw the

construction of Federal buildings during one of the Department's most prolific periods of building. The Public Building Act of 1926 authorized construction of large, new Public Health Service hospitals in San Francisco, Seattle, Baltimore, and New Orleans. All these hospital complexes are strikingly similar in appearance with narrow wings, brick exteriors, and similar Colonial Revival architectural details.

Certain buildings and elements from the original San Francisco Marine Hospital were retained and integrated into a new site layout. Three buildings were kept: Building 1807, used for staff quarters, constructed circa 1920; Building 1809, constructed in 1920, and Building 1810, built in 1915, both of which were officer's residences.

The complex was divided between the hospital and a housing area. Building 1801, the main hospital, formed the centerpiece of the PHS complex. It visually dominates the surrounding buildings with its seven-story height and 174,000 square feet. The nurses' dorm, Building 1808, the second largest building in the complex, would have been the first thing a visitor saw upon entering from the 14th Avenue gate, which was originally the site's only entrance.

The two parts were integrated around an open green whose shape was a remnant of the 1875 radiating hospital ward buildings which formerly stood there. The five almost identical officers' residences along Wyman Avenue were arranged in a curving row which



aligned with two existing residential structures. Today, this residential group maintains the original hospital's eastward orientation toward Mountain Lake. An ancillary facility which contained a group of laboratory buildings (Buildings 1818 and 1819) was located north of the main hospital and connected to it by Wedemeyer Road.

The Marine Cemetery, located north of the present-day hospital, was created in the late 1880s to bury those who died while at the hospital. The list of burials, which is estimated to include as many as 585 graves, includes sailors from around the world, ranging from Scandinavia to the Hawaiian Islands. The

cemetery was used until approximately 1915, when interments stopped. Photos taken in the 1930s make it clear that the cemetery was maintained with neat rows of white grave markers. Photos from the 1950s indicate that the grave markers were no longer present, although the cemetery site can be clearly distinguished. In 1969, in order to construct a large parking lot north of the hospital that could be connected to the hospital by a pedestrian bridge, fill was added on top of the western portion of the cemetery to provide a level grade for the parking lot. Excavations performed in 1994 in the area of the former cemetery identified human remains under approximately 10 feet of fill, confirming that the grave sites remain to this day.

In the early 1950s, plans were drawn up to expand the size of the hospital. By this time, the USPHS had moved from the Treasury Department to the Federal Security Administration, forerunner to the Department of Health, Education and Welfare [known today as Health and Human Services]. Design and construction was handled by the Public Building Administration, who hired the San Francisco firm of Douglas Dacre Stone and Lou B. Mulloy to design two large seven-story wings attached to the front of the existing hospital. In the twenty years since the original hospital was designed, Modernism gained currency and the addition to the hospital was designed in the Modern vocabulary. The architects of the addition used the same buff brick and massing as in the existing structure but dramatically increased the amount of glazing by grouping double hung windows in strongly expressed horizontal bands. The two wings are connected by a one-story structure at the ground level and offer two entrances into the building instead of a single, central entrance. Large glazed areas on the ground floor at the southern corners of each wing face the reconfigured entrance area. Blue glazed ceramic panels were used on the front face of each wing. Roof terraces covered with cantilevered roofs provided an excellent viewing opportunity for hospital patients. During this same remodeling of the hospital, a new road segment was added to create another entrance to



TWO WINGS AND A CENTRAL OFFICE SECTION WERE ADDED IN 1952 TO THE MAIN HOSPITAL BUILDING
source: Presidio Trust

the PHSB from 15th Avenue, and a large parking lot was added to the southwest of the main hospital by filling what was formerly a sandy slope. The brick and steel gates and the large parking lot to the west of this road segment were added at the same time. An addition was made to the Engineering Building on its west side, and two two-story additions were made to the rear, middle wing of the original hospital.

Development of the Battery Caulfield

At the same time the original PHSB complex was being extensively remodeled, the Army was beginning construction of the Nike Missile site on a site north of the PHSB complex. Given the name Battery Caulfield, it was constructed in 1953 as part of a national anti-aircraft defense system. A response to the Cold War threat, it is one of 300 sites constructed by the Army to protect the 40 most populous U.S. urban areas. These Nike Missile sites were virtually identical in design. At Battery Caulfield, there are three underground storage magazines where the Nike Missiles were stored. There is a pair of steel trap doors which connect the magazines to the paved surface above. Missiles were transferred, via elevators, from the underground magazines to the surface, where steel racks and launching assemblies were built on either side of the trap doors. Today, only the paving and the underground magazines remain.

By 1974, this surface-to-air missile system was made obsolete by the widespread deployment of intercontinental ballistic missiles. Within the Golden Gate Recreation Area, besides Battery Caulfield, there are Nike Missile sites remaining at Fort Funston and Fort Barry, in the Marin Headlands. The Fort Barry installation is the only Nike Missile site in the U.S. that has been restored and is open to the public.

Adjacent to Battery Caulfield are two concrete buildings which were constructed as part of the World War II building campaign at the Presidio. Building 1450, constructed in 1942, was a radio transmitting station built to serve the coastal defense batteries. It is a



BUILDING 1450 VIEW FROM THE SOUTHWEST
source: Presidio Trust

two-story utilitarian structure with a small third floor penthouse. Building 1451, which sits next to it, was constructed in 1943 as a generator building to support the radio transmitting activities operating next door. Once the three Nike Missile silos were constructed on adjacent land, these two buildings were adapted to serve this new function. Building 1450 was used for missile launch control, sleeping quarters, and for missile maintenance. Building 1451 was also used to support missile operations. The buildings and missile launch areas were surrounded

by a chain-link fence to create a secure compound.

Although Building 1450 is a utilitarian concrete structure, it nevertheless has some exterior stylistic elements, most notably a series of decorative, recessed beltcourses which span between the windows to accent the horizontality of the building. The building's entry door, framed by a heavy cast-in-place molding, provides an additional decorative feature. Architecturally, it is one of the most "modern" early 1940s buildings constructed at the Presidio. Building 1451 is utilitarian without any notable stylistic features.

D. THE LANDSCAPE OF THE PHSH COMPLEX

Defining Cultural Landscape

The Presidio has been inhabited continuously for hundreds of years; it is likely that Native Americans created encampments near Mountain Lake before European settlement, and the De Anza party camped on the shore of the lake before moving farther into the Presidio. The Presidio has been affected by human activity, as revealed by infrastructure, roadways, paths, buildings, and designed open spaces that transformed the site, vegetation, drainage, and topography.

The 1996 publication, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, designates places like the Presidio as cultural landscapes: "geographical area[s] (including both cultural and natural resources and wildlife or domestic animals therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values." Parts of the Presidio can be described more specifically as historic designed landscapes, which are "consciously designed or laid out by a landscape architect, master gardener, architect, engineer, or horticulturist according to design principles" and may display aesthetic values or be associated with significant practitioners, events, or trends in landscape architecture. Historic landscapes are dynamic and change over time and attain a range of cultural values.

The Secretary's Standards outline procedures for the rehabilitation of cultural landscapes like the Presidio based on the understanding that such sites evolve over time. Rehabilitation is defined as "the act or process of making possible a compatible use for a

property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values."

The principle of cultural landscape rehabilitation is that new development should respect the historical character of the site without simply replicating it. Interventions should be informed and inspired by extant (existing) features and important non-extant features (features that no longer remain) in the cultural landscape, and significant existing features should be preserved and enhanced. However, new designs should not attempt to reconstruct or imitate what existed previously in ways that are falsely historical or inappropriate for current uses.

Cultural Landscape Features

Spatial Organization

The PHSB complex has two types of open space: primary, formal open spaces that served as public faces, and enclosed, internal semi-public spaces. The hospital and nurses' dorm presented a formal, monumental front to the city that included a parking terrace, an entry drive, and a lawn. However, both the entry drive and the great lawn were significantly changed in the 1950s and these features are no longer extant. Another formal open space is created by the sloping lawn which sets off the Wyman Avenues houses (Buildings 1811 -1815) when seen from Mountain Lake. This open space remains essentially unchanged.

In addition to these large, formal public spaces, the site included a series of enclosed semi-public spaces that were internal to the complex. There were two courtyards between the wings of the 1930s hospital building, and the hospital complex was separated from the officers' housing by a central green bordered by trees.

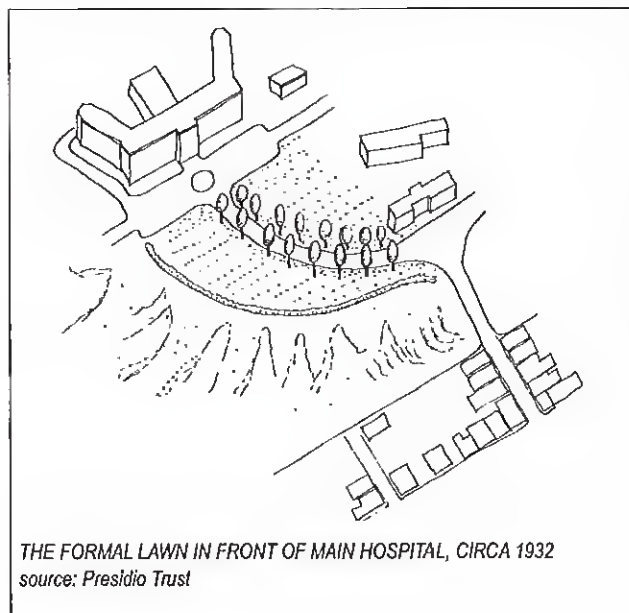
The physical organization of the PHSB complex is based on having one dominant building surrounded by support buildings whose proximity is determined by functional

and programmatic considerations.

The hospital occupied the most prominent position on the site; associated buildings were located adjacent to it; and the infectious disease laboratories were isolated at the back of the site. The officers' housing comprised a distinct precinct within the complex that was smaller in scale and oriented differently from the institutional buildings.

Topography and Drainage

The configuration of the PHSB complex was strongly informed by the site's topography, which played an



THE FORMAL LAWN IN FRONT OF MAIN HOSPITAL, CIRCA 1932
source: Presidio Trust

important role in the siting of the complex. The core development was on a relatively level natural bench in the south-facing slope of the ridge. The area directly above the building complex was reserved for the cemetery and cistern, and the area below it was left open, allowing views of the landscape that each complex faced.

To protect water quality in Mountain Lake and Lobos Creek, drainage from the PHSH complex was directed to the city of San Francisco combined sewer system.

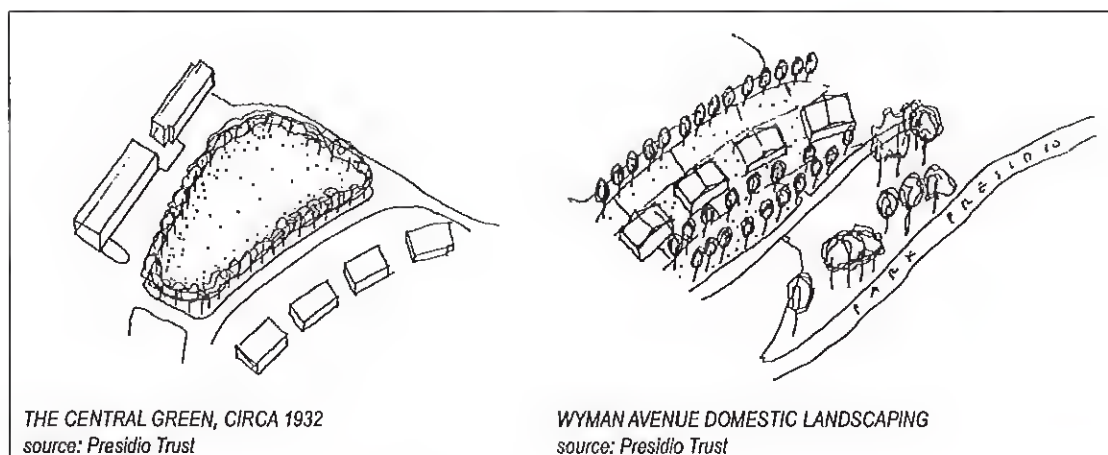
Circulation

During its period of significance, (from 1875 to 1945) the complex was an enclave without a roadway connection to the rest of the Presidio. The hospital was the visual endpoint of a curving, tree-lined drive that entered the Presidio at 14th Avenue and expanded into a parking terrace in front of the building. This curving road way was replaced as a result of the 1952 building renovation, which reconfigured the road and parking in front of the hospital, and added a direct roadway connection to 15th Avenue. The nurses' dorm served as a kind of gatehouse for the main building when 14th Avenue was the only entry into the site. The present-day connection between Battery Caulfield Road and Wedermeyer Road was constructed in the early 1980's after the Army took over the complex.

The Wyman Avenue houses included walks parallel to the road along the front and back of the row and walks that connected each building to the road and to the central green.

Vegetation

Vegetation was used to articulate different kinds of spaces at the PHSH complex. Acting as a foreground to the hospital building, a formal open space was created, consisting of a sloping lawn bisected by the curving entry drive. The drive was lined with evenly spaced, clipped trees. The lawn's curving southwestern edge was defined by a trimmed hedge. At the center of the complex, the central green was articulated by tree planting at its edges and lawn in the middle. The Wyman Avenue houses were defined by lines of trees at their back and its front as well as by a forested area between Wyman and Park Presidio Boulevard. The north and west sides of the cemetery were bordered by a cypress windrow. The former tennis court across the street from Building 1808 was defined by a



group of eucalyptus trees which still remain. Many of the buildings in the complex were partly surrounded by foundation planting.

The site includes a large stand of Monterey Pine trees just north of the hospital. Today these trees buffer views of the hospital service areas from the upper plateau and provide a visual backdrop for the hospital building from the city.

Site Structures and Objects

The site includes a number of small-scale features that are significant remnants of historical domestic life at the PHSB complex. The front yards of the two most northern houses on Wyman Avenue were defined by low battered walls. Directly to the west of these houses was a terraced garden, separated from the central green by a concrete retaining wall. Within the garden, the foundations of a pair of small greenhouses still remain along with planting beds defined by wood.

Character-Defining Landscape Features

- Open space which defines a foreground to Building 1801 and 1808
- Open space which defines a foreground to the Wyman Avenue houses when viewed from Mountain Lake
- Central green serving as a semi-public open space, consisting of a flat lawn area defined by trees
- Buildings sited to respond to topography and views
- Historic road alignments associated with Wyman Avenue houses and central green
- Residential landscape associated with Wyman Avenue houses



THE MAIN HOSPITAL BUILDING, AS IT APPEARED IN 1932, DOMINATES THE COMPLEX BECAUSE OF ITS SIZE AND PROMINENT POSITION.

source: Park Archive and Record Center Photo Collection, Golden Gate National Recreation Area

- Remnants of the historic garden, including retaining walls, stairs and greenhouse foundations
- Tree stands surrounding former tennis courts
- Tree stands on slope behind Building 1801

E. THE ARCHITECTURE OF THE PHSB COMPLEX

The building complex which exists today retains much of the original design intent of the 1932 plan despite the 1952 additions to the main hospital and the engineering building. Even the new roadway entrance from 15th Avenue and the gate and the large parking lots added to the site did not substantially alter the character of the complex. When the 1932 hospital complex was designed, its main orientation changed from facing Mountain Lake to facing south, to the city of San Francisco. A new site plan was developed which retained three of the buildings from the previous hospital complex, and also retained the majority of the former road system. Today, Wyman Avenue, Belles Street, and Park Boulevard remain essentially unchanged from their earlier alignment. The designer of the 1932 hospital was able to create a complex of 16 buildings which are well-organized according to a functional program and are also responsive to the natural topography.

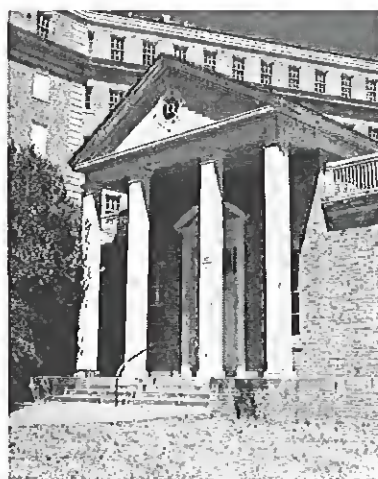
Materials

The main hospital (1801) and the nurses' dorm (1808) are the largest buildings on the site and are finished in buff brick. Smaller institutional components, such as the laboratories

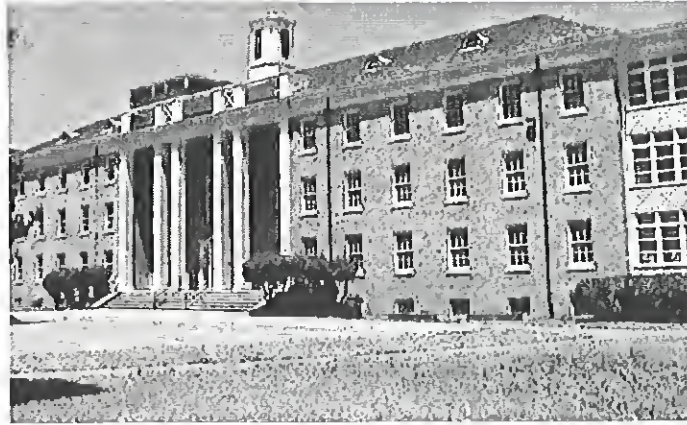


BUFF BRICK AND FLAT CLAY ROOFING TILES ARE USED ON ALL TYPES OF BUILDINGS WITHIN THE PHSB COMPLEX

source: Presidio Trust



(1818 and 1819) and the recreation building (1805) are also buff brick buildings. Residential and service buildings are finished in painted stucco. The Wyman Avenue houses have white painted stucco walls but use buff brick for their foundations. Flat clay roofing tiles are used on most of the buildings. They are a unifying element which create a cohesive building complex.



NURSES' DORM, BUILDING 1808
source: Presidio Trust

Stylistic and Architectural Elements

A strong Colonial Revival architectural vocabulary is used throughout the complex in both institutional and residential structures. For the main hospital (1932 portion), the basic division of the elevation into a base, middle, and top represents a classical organization pattern. The hospital facade, as well as all PHSB buildings, are strongly

symmetrical. The building entrance is located in a central projecting bay with three arched openings forming the entry. Limestone facing laid to look like cut blocks is used on the first floor to create a base story and is used for window sills and heads. Terra cotta which imitates the appearance of limestone creates classical banding at the cornice between sixth and seventh story. Stone quoining articulates the corners and adds to the



WOOD, DIVIDED LIGHT WINDOWS ARE USED
THROUGHOUT THE MAIN HOSPITAL BUILDING
source: Presidio Trust

classical effect. The nurses' dorm also has a prominent central entrance emphasized by a partially recessed porch with square wood columns. The railing over the porch and the octagonal cupola are strong Colonial Revival details which further emphasize the center of the building. The recreation building also emphasized the same central entry with a pedimented porch with large columns. The classical door surround demonstrates the stylistic rigor applied to these buildings. On the other hand, the buildings that do not have public or institutional functions are much plainer and less detailed. The laboratories (1818 and 1819) and the dormitory buildings (1806 and 1807) have some classical detailing, but it is used very sparingly.

Divided-light, wood double-hung window are used consistently on all buildings except for the engineering building (1802), used singly or combined in pairs or threes. Applied to both the large-scale, seven-story hospital and to the one-story laboratory buildings, this window type is a significant character-defining feature.

The Wyman Avenue houses are designed in the Colonial Revival style on a residential scale. These buildings have defined bases, expressed frequently by differentiating the foundation from the main floors of the house. Although Buildings 1812 through 1815 are duplexes, each duplex shares a single entry porch and is designed to look like a single



ONE OF THE WYMAN AVENUE DUPLEX HOUSES

source: Presidio Trust

house. The two front doors are detailed in such a way as to appear to be part of a single, central door.

Character-Defining Building Features

Materials

- Buff Brick, with limestone and terra cotta trim
- Red clay tile roofs
- Stucco wall finishes
- Double hung (six-over-six) wood windows

Stylistic Elements

- Centralized entry, often with a porch
- Classical architectural details: porches and columns, railings, moldings, classical elements used at roofs (cupolas, pediments, eave details)

Building Form

- Symmetrical building massing and facade organization
- Wide range of building scale and typology from small residences to the imposing main hospital
- One dominant building with secondary and support buildings organized around it
- Long narrow buildings and wings that facilitate excellent daylight access
- Articulation of the building base emphasize the building's full contact with the ground, giving a solid weighty appearance

III. Planning and Design Guidelines

A. INTRODUCTION

The following section presents Draft Planning and Design Guidelines for the PHSB complex that address issues of site planning, protection of natural resources, public access, landscape, transportation, building location, massing and scale, and architectural design. These Guidelines will be finalized only after public input and consultation with historic preservation agencies. Their purpose is to reiterate and explain and develop the planning principles and planning district guidelines stated in the Presidio Trust Management Plan, in order to provide specific direction to a third party proposing to develop the district. The ultimate goal of the Planning and Design Guidelines is the protection of the historic buildings and landscapes at the PHSB as well as the facilitation of design excellence in all new building and development on the site. The guidelines are divided into eight categories:

Spatial Organization, Open Space and Views

Historic Preservation Considerations

New Construction

Landscape Design

Natural Resource Protection

Circulation and Parking

Public Access

Environmental Sustainability

Page references throughout the text which follows refer to the Presidio Trust Management Plan (Adopted August 2002.)

B. SPATIAL ORGANIZATION, OPEN SPACE, AND VIEWS

Topography has influenced the development of the PHSB district, with the majority of the development on the lower plateau closest to the city and Mountain Lake.

Development of the lower plateau has resulted in a dense concentration of buildings within a compact designed landscape. Buildings are sited according to function and hierarchy in a campus-like setting. Development of the Nike Missile site at the upper plateau was for industrial uses, and included almost 3 acres of paved surfaces and underground missile storage facilities. It evolved for purely functional reasons and does not relate strongly to its immediate context. Unlike the PHSB complex, which has a strong visual and physical links to the adjacent city, the Nike Missile site is ringed by tall trees to the north and east and to the south, overlooks an open space with distant city views. It stands apart from the rest of the district and does not relate to the PHSB complex.

- Respect the natural and historic terrace landform and avoid major regrading and construction on slopes (p.98)
- Maintain the historic patterns of development on the lower plateau (p. 96). The formal placement of buildings around open spaces and the definition of open space and streets through planting should be retained, as shown in Figure 1
- Substantially maintain the "foreground" in front of Buildings 1801 and 1808, and the open space foreground in front of the Wyman residences
- Maintain in part or whole the "central green" west of the Wyman Avenue houses and north of the engineering building as a remnant of the 19th century road network and a defined open space
- Protect the open space between Battery Caulfield and the PHSB complex as a sensitive natural area that contains wetlands and rare plant habitat (p.98)
- Preserve and enhance view corridors and panoramic viewsheds, as shown in Figure 1

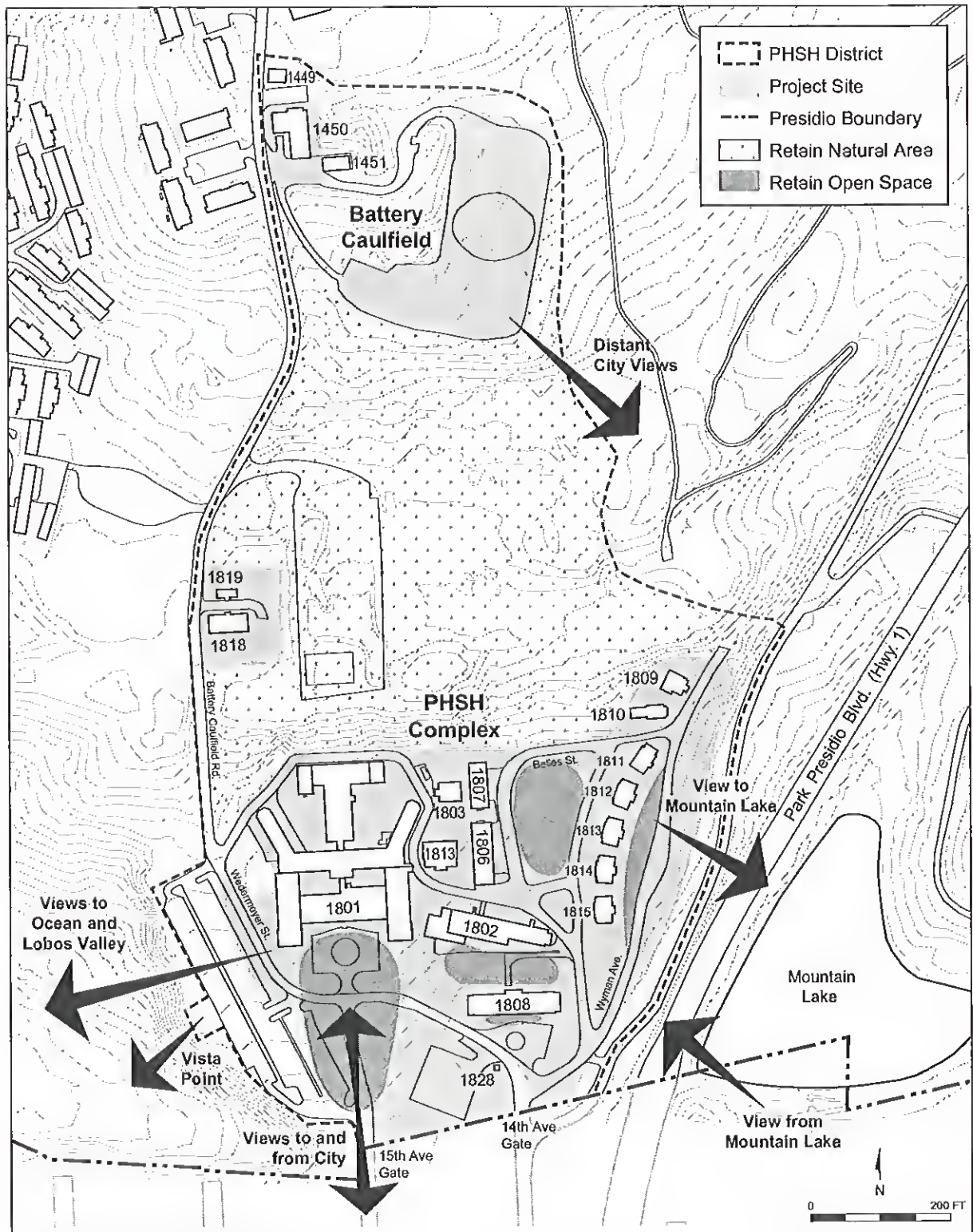


FIGURE 1: OPEN SPACES AND VIEWS

Source: Presidio Trust, 2003

C. HISTORIC PRESERVATION CONSIDERATIONS

The Public Health Service Hospital complex is included in the Presidio's 1993 National Register listing as contributing to the National Historic Landmark District. Of the 17 buildings in the PHS complex, only Building 1803 is listed as non-contributing, although the main hospital and the engineering building include non-historic additions. The Nike Missile site is not a contributing feature. Figure 2 indicates the historic buildings in the district.

The integrity and character of the historic PHS buildings and its associated historic landscape must be protected. Planning new uses for the PHS site may involve demolition of non-historic buildings and building additions, which is permitted. Replacement construction less than or equal to the square footage of the demolished sections, is also permitted, but all proposals for replacement construction must be compatible with the character of the historic district.

- Maintain the historic patterns of development, primarily at the PHS complex (p. 96)
- Rehabilitate historic buildings compatibly for feasible new uses, in accordance with The Secretary of the Interior's Standards for the Rehabilitation of Historic Properties and the Guidelines for Rehabilitating Buildings at the Presidio of San Francisco (p.5)
- Consider taking advantage of the federal Historic Preservation Tax Incentives program by performing a certified rehabilitation of historic structures. The proposed rehabilitation must follow the Secretary of the Interior's Standards
- Make every effort to adapt the historic structures to compatible new uses that require minimal alteration of the character-defining materials, features, spaces and spatial relationships of the buildings and their settings (p.5)
- Identify significant character-defining features in historic buildings, both interior and exterior to determine what is original and therefore sensitive to change
- Removal of non-historic additions, and restoration of lost features (when adequate historic documentation exists) is encouraged but not required. Removal of the 1950s-era central one-story section which connects the two wings would contribute greatly to enhancement of the historic building facade
- Undertake cultural landscape rehabilitation in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines the Treatment of Cultural Landscapes (p.5)
- Design new landscape features and elements to be compatible with the historic setting to enhance remnants of the cultural landscape
- Protect archeological resources and preserve them in place. If such resources must be disturbed, mitigation measures will be undertaken in accordance with the Secretary of the Interior's Standards for the Treatment of Archeological Resources (p.11)

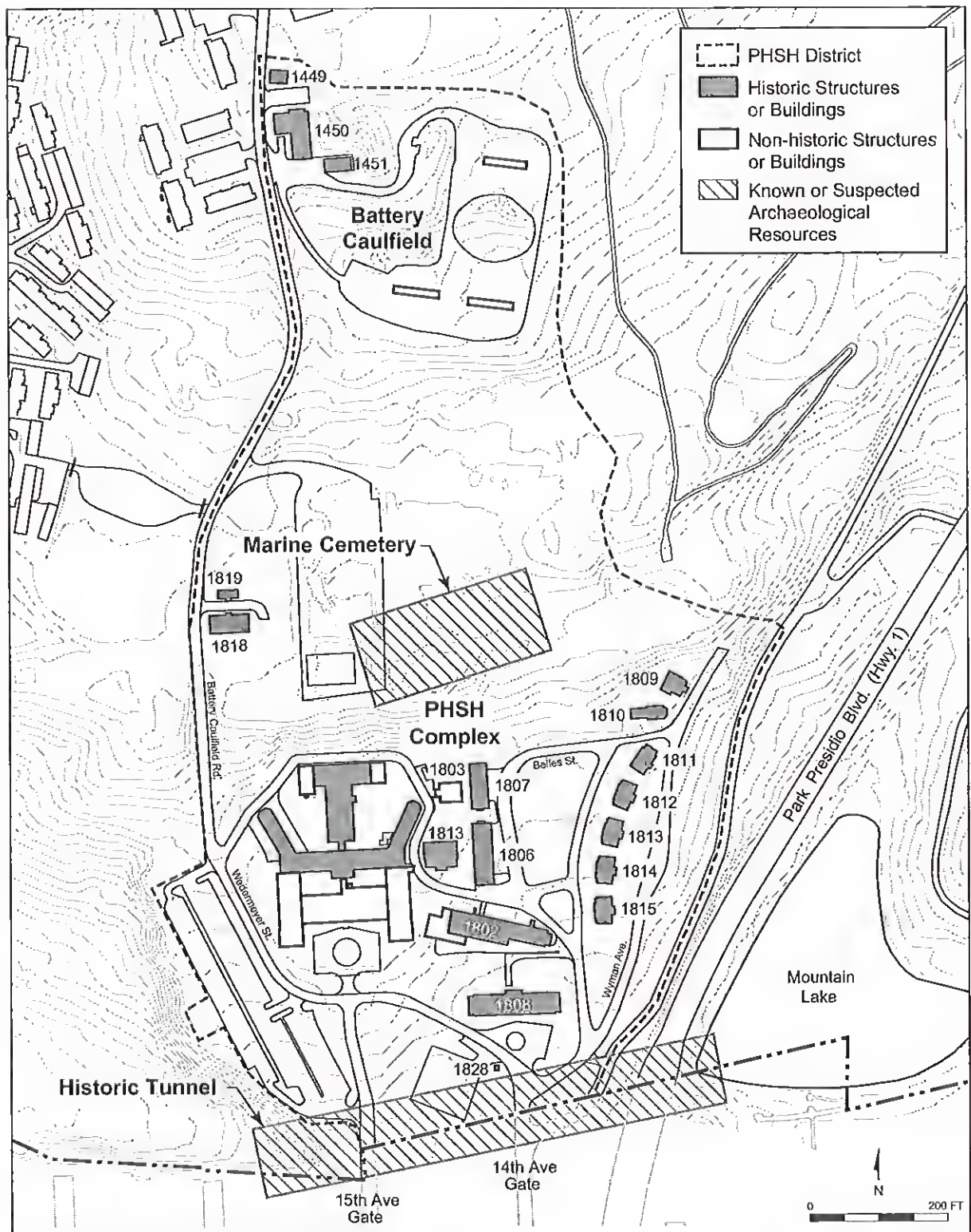


FIGURE 2: HISTORIC STRUCTURES AND RESOURCES

Source: Presidio Trust, 2003

D. REPLACEMENT CONSTRUCTION

Replacement construction may be considered at the PHSB site if non-historic buildings or building additions are removed. Consistent with the PTMP, one square foot of new construction is permitted for every square foot of existing building space that is removed, up to 130,000 square feet of new construction. (p.94)

Replacement construction offers an opportunity to create architectural and landscape design that complements the historic PHSB complex. Developing an appropriate design vocabulary, and employing high quality materials and well-crafted details will ensure that new buildings and landscape elements are compatible.

- Maintain the historic character of the PHSB site by locating replacement construction and additions close to existing buildings, to reinforce the compact, campus-like setting (p. 97)
- Respect historic spatial relationships, scale, and orientation of buildings when locating replacement construction within the PHSB complex (p.96)
- Relate building heights for replacement construction to the height of adjacent existing structures. (p.97) Figure 3 shows how maximum building height should be allocated and where replacement construction may occur
- Keep replacement construction within the PHSB complex compatible with the historic architecture, taking cues from the character-defining features of the existing buildings
- Ensure that any replacement construction does not supercede the former hospital as the predominant building in the complex (p.97)
- Make replacement construction within the PHSB complex complement the existing scale, massing, color and material palette (p.97)
- Ensure that new additions, exterior alteration, or related construction does not destroy historic materials that characterizes the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment (p.7)
- Locate new and replacement construction to protect and preserve views and vistas. Provision of unobstructed and expansive vistas into public areas of the site is critical (p.98)
- Locate replacement construction within Battery Caulfield in such a way as to minimize its visual impact on adjacent areas. Limit new construction to existing paved areas, and develop a visual character distinct from the PHSB complex that responds to Battery Caulfield's specific natural surroundings

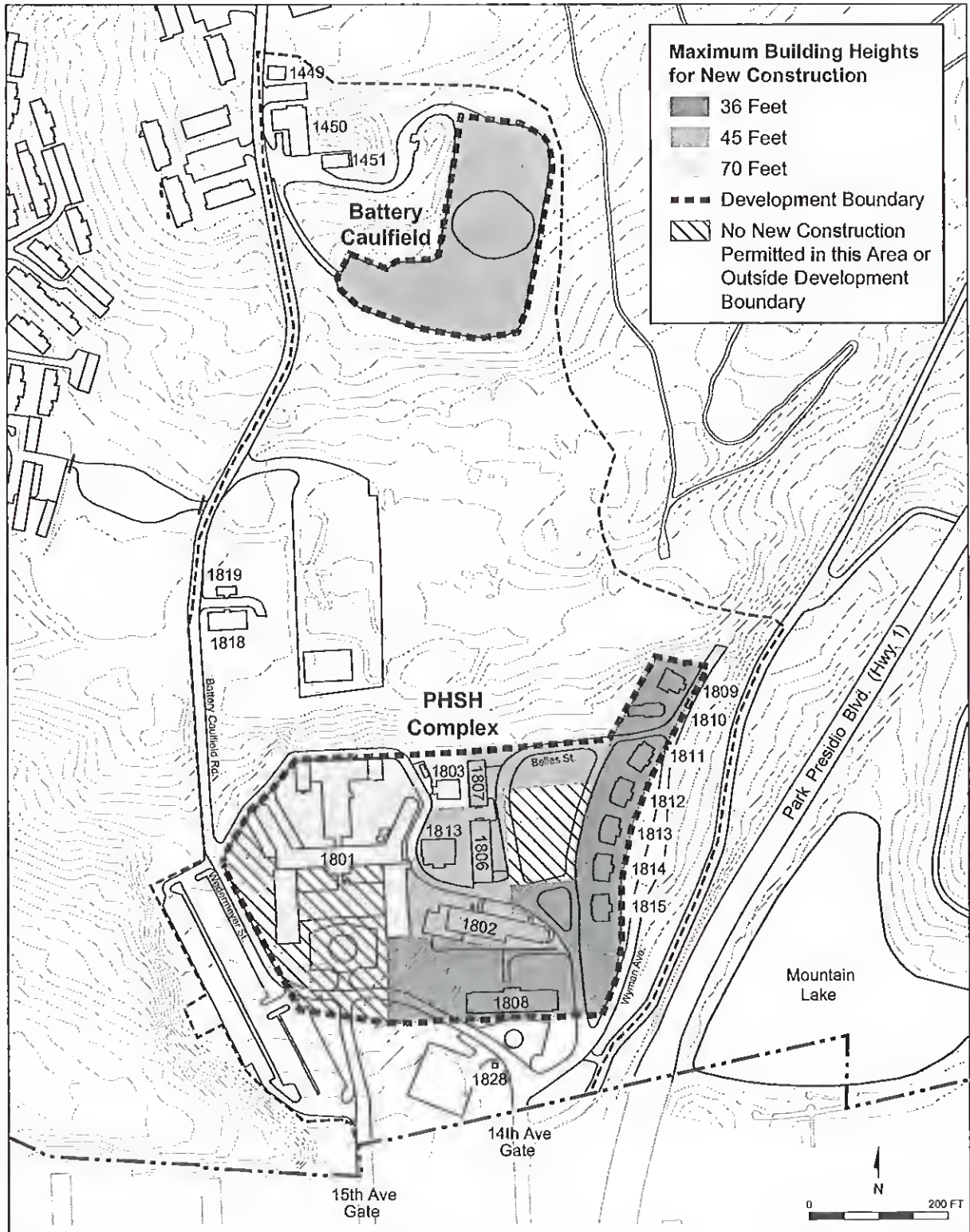


FIGURE 3: HEIGHT LIMITS AND DEVELOPMENT BOUNDARIES

Source: Presidio Trust, 2003

E. LANDSCAPE DESIGN

The PHSH complex's designed landscape consists of a compact site plan in which planting articulates open space, and defines public and private zones. The original designers used uninterrupted, sloping lawns to create formal, public faces to the city. For example, an open foreground in front of the hospital and nurses' dorm was used to set off these important buildings. Another important open space in front of the Wyman Avenue house gave this building group a foreground when seen from Mountain Lake. Tree stands were planted to create screening, and small scale elements were used to create residential settings. Figure 4 indicates the location of major remnant cultural landscape features. The PHSH landscape is a mix of institutional and residential scales, including public, semi-public and private spaces, tied together by a roadway and sidewalk system which creates a campus-like setting.

- Consider planting as part of the overall design of the site to articulate and define historic open spaces and entry sequences (p. 98)
- Make new landscape design compatible with the historic landscape of the PHSH complex, and with the Vegetation Management Plan designations, as amended by PTMP
- Design new landscape and rehabilitate existing historic landscape features within the PHSH complex in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (p.5)
- Design new landscape for Battery Caulfield that uses a native plant palette compatible with the surrounding natural vegetation
- Select site furnishings that conform with historic precedent at the district. The design and placement of all signs and site furnishings should be coordinated with the Presidio Trust to ensure compatibility with Presidio-wide standards
- Use only plants listed on the Presidio Trust's approved plant list for designed landscaped areas. Prior to design work, coordinate with the Presidio Trust to conduct a plant inventory

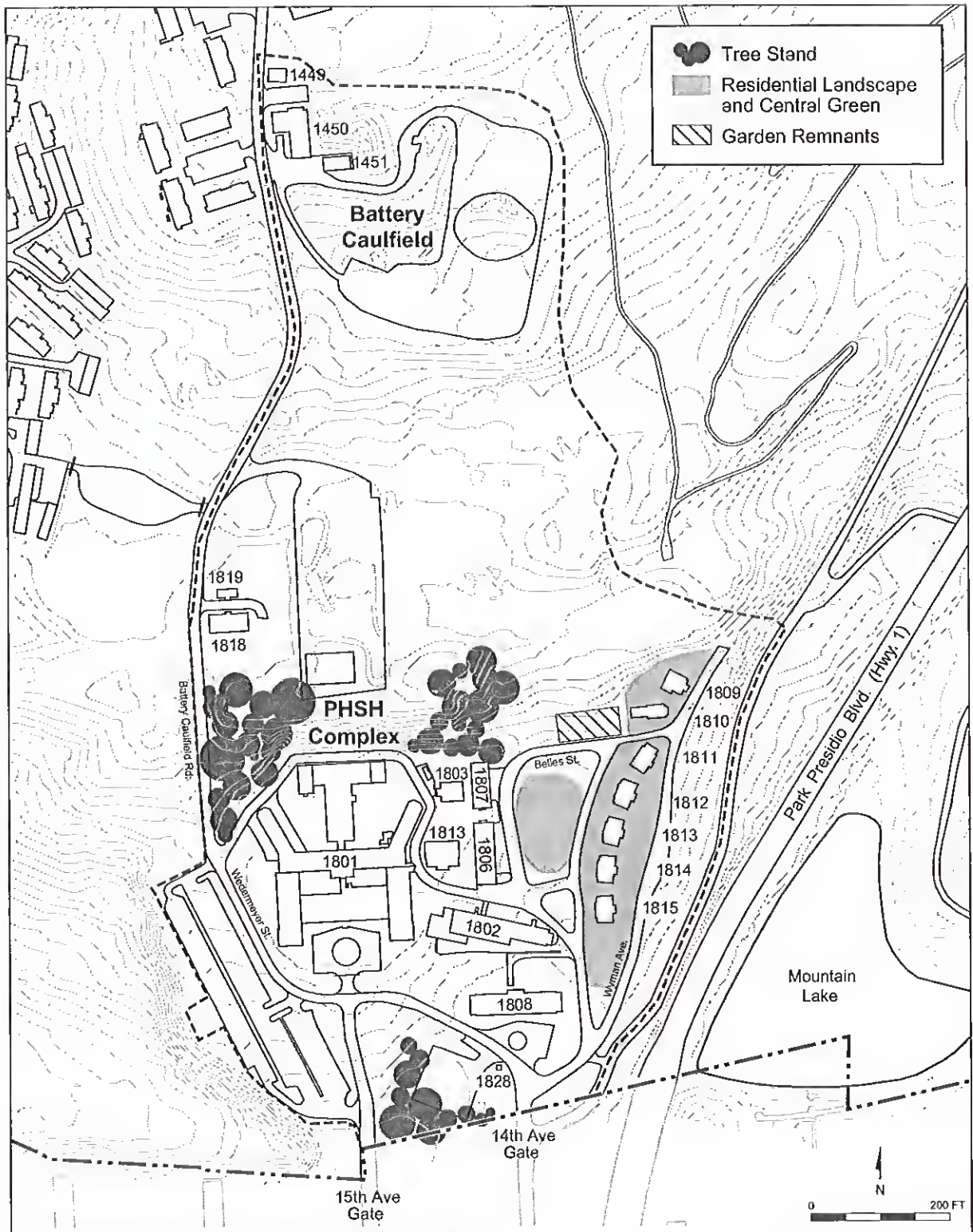


FIGURE 4: CULTURAL LANDSCAPE FEATURES IN THE PHS COMPLEX

Source: Presidio Trust, 2003

F. NATURAL RESOURCE PROTECTION

The PHSH complex and Battery Caulfield are surrounded by sensitive natural and wildlife habitat, as indicated in Figure 5, that will be protected and restored. Natural areas support a variety of native plant species, including the San Francisco Lessingia, a federally-listed endangered species. The area directly north and south of Battery Caulfield is some of the Presidio's most valuable bird habitat. As a quail habitat restoration site, it will play a major role in reestablishing the Presidio's quail population. At the base of Battery Caulfield's southern slope lies the Nike Swale, a seasonal wetland which supports native vegetation and wildlife. To the east and west of the site, sections of the Presidio's historic forest remain and will be enhanced by the Presidio Trust. In the coming years, the Presidio Trust will continue to restore the native plant areas adjacent to the two sites, allowing for the recovery of the Lessingia and propagation of other native plants and wildlife populations (p.15 -17). The Trust will continue to maintain these areas within the district. In addition, the Trust will commemorate the Marine Cemetery as an important cultural resource.

The PHSH district is sited on a ridge that drains west to Lobos Creek (the source of the Presidio's drinking water) and east to Mountain Lake. Protection of these watersheds is key to the continued health of the lake and quality of the drinking water supply. All of these issues must be factored into rehabilitation of existing and design of any new facilities.

- Protect adjacent native and sensitive habitat communities (p.15). No development is permitted within native plant management zones, as identified in Figure 5
- Provide fencing or vegetative buffers where development borders native plant communities
- Protect the Lobos Creek watershed from direct stormwater runoff. Utilize the existing stormwater system or expand it to accommodate new uses or site configurations. Limit stormwater flows through the reduction of impervious surfaces and addition of porous surfaces, where appropriate
- Design new uses at Battery Caulfield to minimize changes to the local hydrology and to protect native vegetation surrounding it

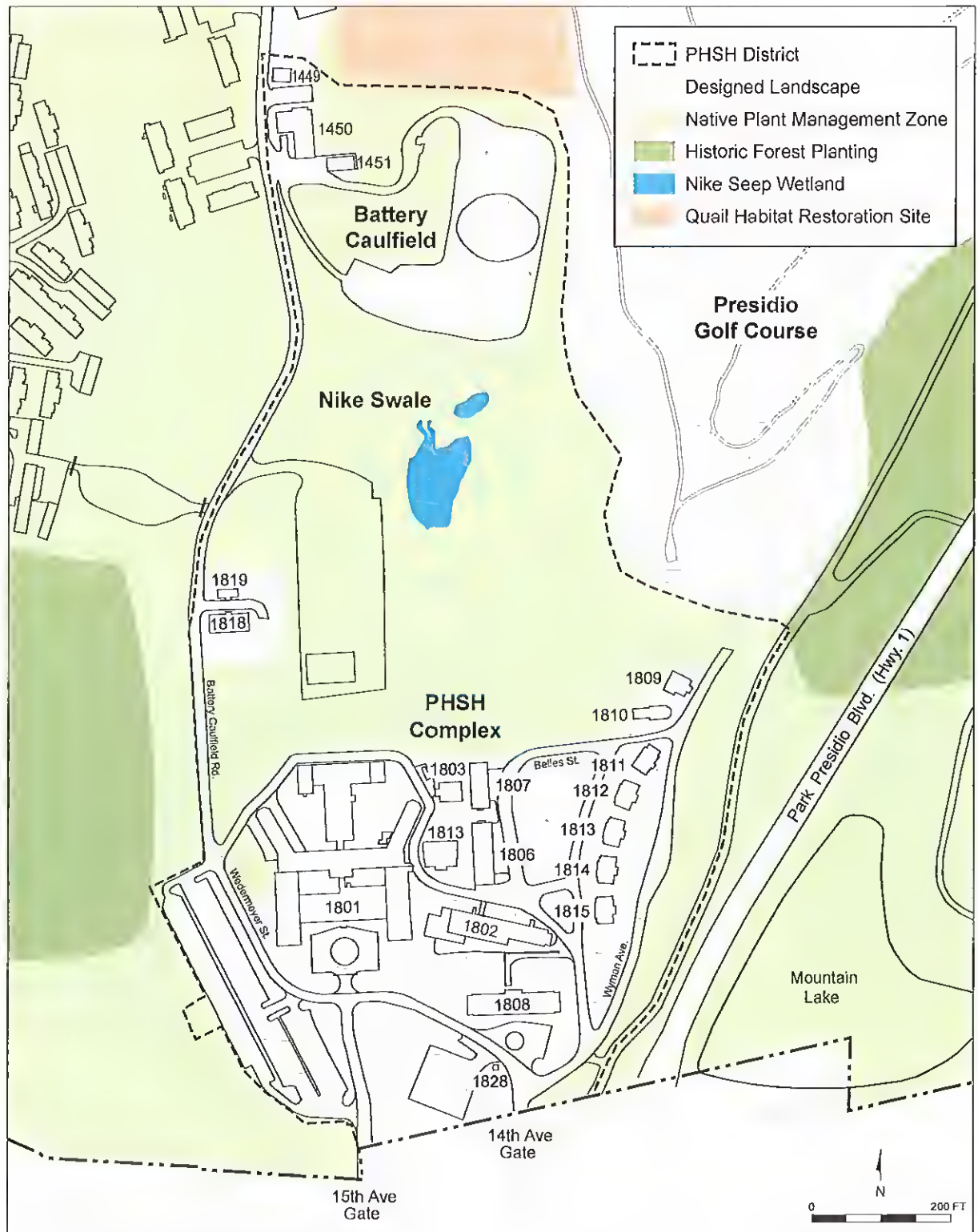


FIGURE 5: VEGETATION AND NATURAL RESOURCES

Source: Presidio Trust, 2003

G. CIRCULATION AND PARKING

The PHSB complex has historically been a separate enclave. When it was an active hospital, it was reached directly from 14th and 15th Avenues. Not until the hospital closed was Battery Caulfield Road extended to provide direct access to the Presidio. As a result of its history, the primary orientation of the site is towards the city with primary access from 14th and 15th Avenues.

Currently, the 14th Avenue gate is closed, but the Presidio Trust, in accordance with PTMP, proposes to institute a one-way couplet using both 14th and 15th Avenues as the entrance and exit to PHSB district. However, roads within the PHSB district will be designed to discourage cut-through traffic (p. 99) with Battery Caulfield Road retained for secondary, Presidio traffic. Figure 6 illustrates this proposal.

The Presidio Trust seeks to balance parking demand and supply in order to discourage auto use while at the same time avoiding spill-over impacts in adjacent neighborhoods and natural areas. Surface parking within the PHSB complex currently provides 324 parking spaces, although some reduction is likely due to remediation activity, introduction of trails, and other public access improvements (p.51).

- Discourage vehicular traffic not destined for the PHSB district from passing through the area. Consider instituting traffic-calming techniques to slow traffic as it passes through the site
- Develop comprehensive Transportation Demand Management strategies that encourage tenants, residents, and visitors to use public transit and other alternative modes of transportation. Minimize traffic impacts from new uses and enhance public access through improved mass transit options (p. 99)
- Locate parking and loading areas to complement and to minimize conflicts with adjacent areas. Use landscape treatments to provide appropriate screening, shade, and visual buffers from surrounding areas where surface parking is provided
- Provide sufficient parking spaces to serve proposed uses, up to a maximum of five percent above average demand at peak periods
- Create strong pedestrian and bicycle connections through the PHSB complex to link with surrounding destinations and nearby local and regional trails (p.99). Enhance pedestrian and bicycle travel safety in the area
- Direct storm-water drainage from surface parking lots into the city's combined system to avoid runoff into the Nike Swale, Lobos Creek, and Mountain Lake watersheds
- Develop traffic-calming techniques at the Battery Caulfield site that help protect adjacent quail populations

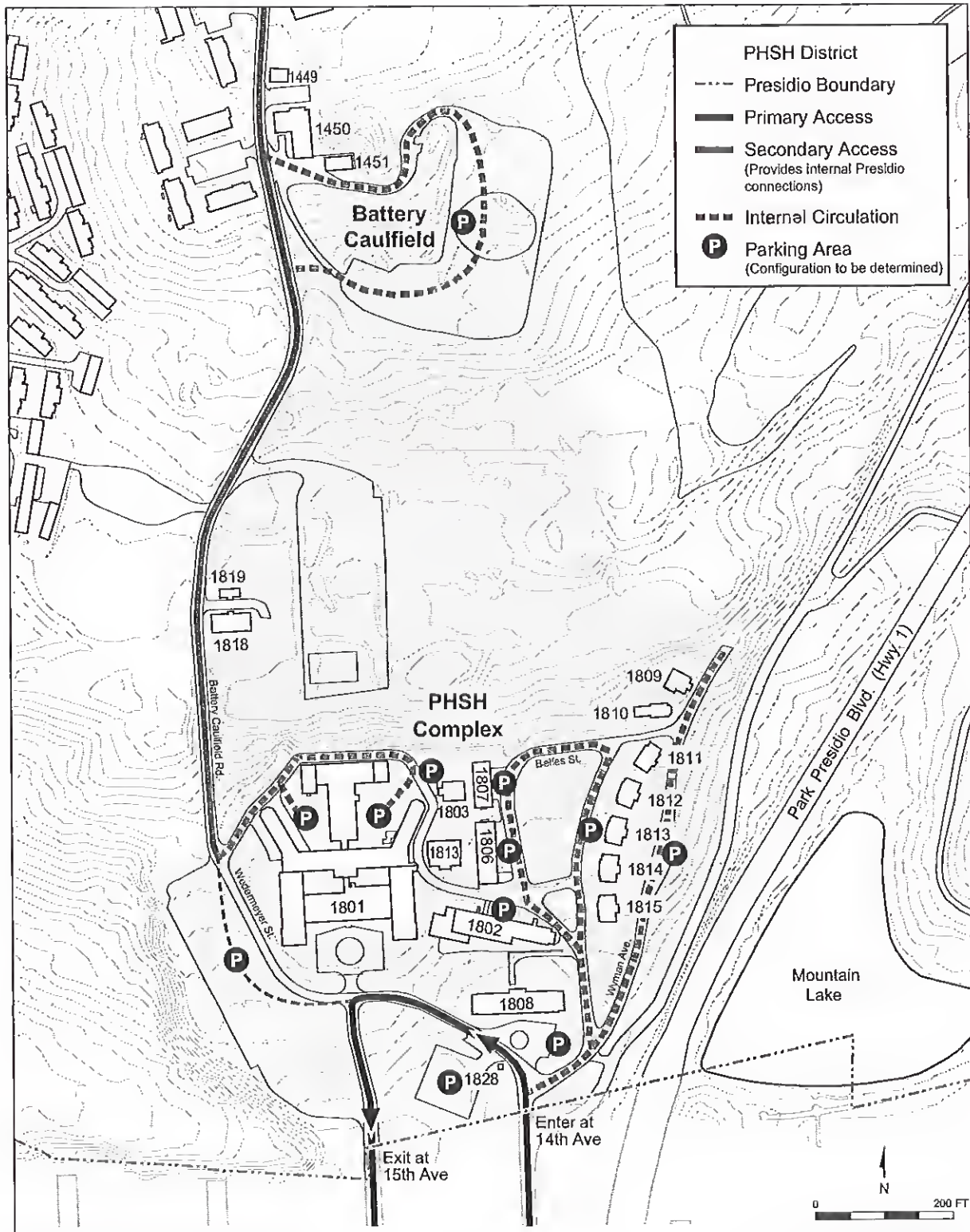


FIGURE 6: CIRCULATION AND PARKING

Source: Presidio Trust, 2003

H. PUBLIC ACCESS

Located at the border between the city and the Presidio, the PHSB district offers opportunities for recreation, and enjoyment, and should be open and inviting to all visitors. Hikers and bicylists will be a presence within the site, and will expect access and connection to surrounding destinations such as Lobos Creek, Mountain Lake, existing and new hiking trails, and other Presidio destinations. In the coming years, the Presidio Trust plans to develop new trails and trailheads and make improvements to existing trails (p.25) that will affect activities in and around the PHSB district, as shown in Figure 7. In addition, a vista point is planned offering views of Lobos Creek and the ocean. These improvements will bring visitors into the area and expand recreational opportunities.

- Develop points of interest for visitors and consider providing interpretive opportunities which may include wayside displays, walking tours, and exhibits related to the ecology and history of the site. These may be located in building lobbies and other public spaces, and throughout the landscape
- Provide site development that encourages pedestrian and bicycle access and activity
- Accommodate compatible recreational uses such as trails, consistent with protection of natural and cultural resources. (p. 98)

I. ENVIRONMENTAL SUSTAINABILITY

Sustainability is an approach to design that recognizes that every design choice affects the natural and cultural resources of the local, the regional, and the global environment. For the PHSB district, the Trust anticipates that rehabilitation of historic structures, removal of existing buildings, replacement construction, and changes to the landscape will be proposed. Sustainable practices should be considered and proposed for each of these undertakings and should begin at the inception of the project's planning phase, and extend through the life of the building and site.

- Follow practices outlined in the Presidio Trust's Draft Green Building Guidelines for the Rehabilitation of Historic and Non-Historic Buildings, to the extent feasible
- Conserve energy by minimizing energy expended during construction and by using systems that minimize energy over the operational future of the buildings. Recognize that reuse of existing buildings is itself a sustainable practice
- Use environmentally responsible building materials
- Conserve water by reducing consumption. The use of reclaimed water is not permitted for irrigation in the PHSB district. Designed landscapes that are drought tolerant and incorporate water conservation measures are encouraged
- Design energy efficient building systems. Take advantages of natural site features and solar orientation to reduce heating and cooling loads
- Reduce or eliminate waste by reducing consumption, reusing materials, and recycling. Recycle building waste produced during selective demolition
- Decrease the use of the private automobile, and increase the use of public transportation, bicycle, and pedestrian circulation. Explore alternative means of transportation that have fewer negative environmental impacts than automobile use
- Provide a healthy environment by reducing or eliminating the use of toxins and pollutants and by properly managing their disposal

IV. Issues for Further Consideration

A. ENVIRONMENTAL REMEDIATION

There are several areas within the PHSB district, or adjacent to it, which have been identified for future environmental remediation. Most notable is Landfill 10, which encompasses the entire large parking lot in the southwest portion of the PHSB complex. In order to create a large parking area, fill was added to level the area's natural slope in the early 1950s when the main hospital underwent a major expansion. Landfill 10 has been carefully monitored for the past five years and a remedial action plan is being developed that will be carried out by the Presidio Trust and its contractors. Work is scheduled to begin in Fall 2004. Actions may require reconfiguring the parking lots and access roads and may reduce the size of the parking lot.

Landfill 8 sits on the plateau above the PHSB complex, on the site of the former Marine Cemetery. A remedial action plan for this area has not yet been developed, but it is unlikely the fill will be removed or the cemetery will be disturbed. At Battery Caulfield, there is evidence of contaminated material in underground drains associated with the former Nike Missile underground bunkers. Removing sediment from these drains will be the likely remedy.

In addition to landfills and underground contaminants, it is expected that the buildings throughout the district contain lead-based paint and possibly asbestos-containing materials. While some asbestos abatement was completed by the Army, it should be assumed that additional lead-based paint, asbestos, and other hazardous materials are present and require removal.

B. ADDITIONAL ASSESSMENT OF HISTORIC BUILDING AND CULTURAL LANDSCAPES

Detailed information on the condition and significance of individual historic buildings and their interior features has not been provided within these Guidelines. The absence of this information should not suggest that such information is not needed. Prospective project development teams are advised to perform their own assessments to develop a comprehensive understanding of the historic buildings within the PHSB district, and determine how the scope of their proposed modifications that will conform to the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

In addition, a complete cultural landscape assessment has not been done for the district, nor is the information presented in these Guidelines intended to act as such. Prospective project development teams are advised to perform their own cultural landscape assessments of the PHSB district, and determine how the scope of their proposed modifications that will conform to the Secretary of the Interior's Standards for the Treatment of Cultural Landscapes.

C. PEDESTRIAN AND BICYCLE TRAILS

Prospective project development teams should become familiar with the planning effort underway regarding trails and bikeways within the Presidio. A final Trails and Bikeways Master Plan will be finalized in early summer of 2003 and will indicate several existing and proposed hiking and bicycle trails, along with a trailhead and scenic overlook, within the PHSI district. These trails will provide public access to the district for recreational purposes.

V. Resources

Langellier, John

- 1996 El Presidio de San Francisco: A history under Spain and Mexico 1776-1846.

National Park Service, U.S. Department of Interior (NPS):

- 1993 National Register of Historic Places Inventory-Nomination Form, Presidio of San Francisco.
- 1994a "Management of Cultural Landscapes" chapter in NPS-28: Cultural Resources Management Guidelines. Washington, D.C.
- 1994b Final General Management Plan Amendment and Environmental Impact Statement, Presidio of San Francisco, Golden Gate Recreation Area.
- 1995 Guidelines for Rehabilitating Buildings at the Presidio of San Francisco. Prepared for the National Park Service by Architectural Resources Group (ARG).
- 1996 The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.
- 1997 Natural Resources Inventory and Vegetation Options, Presidio of San Francisco. Prepared by Jones and Stokes, Associates, Sacramento.
- 1997 The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings.

Presidio Trust

- 2002a Final Environmental Impact Statement. Presidio Trust Management Plan-Land Use Policies for Area B of the Presidio of San Francisco. San Francisco, CA. Volumes I, II, and III. May.
- 2002b Presidio Trust Management Plan - Land Use Policies for Area B of the Presidio of San Francisco. San Francisco, CA.
- 2002c Record of Decision. Presidio Trust Management Plan - Land Use Policies for Area B of the Presidio of San Francisco. San Francisco, CA.
- 2001 Vegetation Management Plan for the Presidio of San Francisco. San Francisco, CA.
- 1999 Draft Green Building Guidelines for the Rehabilitation of Historic and Non-Historic Buildings. San Francisco, CA

Presidio Trust and National Park Service

- 2002 Draft Presidio Trails and Bikeways Master Plan & Environmental Assessment for the Presidio of San Francisco. San Francisco, CA.

Thompson, Erwin N.

- 1995 Defender of the Gate: The Presidio of San Francisco, A History from 1846 to 1995. (Historic Resource Study). Volumes I and II.

U.S. Fish and Wildlife Service (USFWS)

- 2001 Draft Recovery Plan for Coastal Plants of the Northern San Francisco Peninsula. Portland, OR.

Wilbur Smith Associates

- 1999 Presidio Public Health Service Hospital Transportation Study. Implementation Planning for the Presidio. July 6.

Appendix B

Scoping Information Packet



August 27, 2003

(Meeting Location Revised September 19, 2003)

(2nd Meeting Added and Comment Period Extended October 29, 2003)

Notice to Initiate Public Scoping and Prepare an Environmental Assessment for the Public Health Service Hospital at the Presidio of San Francisco, California

To the Public and Interested Agencies:

The Presidio Trust (Trust) is proposing to implement an important component of its comprehensive plan for the Presidio of San Francisco (Presidio). This information packet provides background about the Trust's proposed action (project), and seeks public comments and input on the project.

In August 2002, the Trust adopted the Presidio Trust Management Plan (PTMP), the general land use plan and policy framework developed to guide the Trust's future project proposals within Area B of the Presidio. Of the seven Presidio land use planning districts, PTMP identified the Public Health Service Hospital district (PHSH district or district) for reuse as a residential and educational community. Its centerpiece would be the rehabilitation and reuse of the historic Public Health Service Hospital (PHSH or Building 1801) and of the other historic structures in the district. Future consideration would be given to demolition and new replacement construction up to specified limits.

Project Statement

The Trust proposes to rehabilitate and reuse the PHSH as well as to rehabilitate and reuse other historic buildings within the district consistently with the land use options of PTMP. The proposed action also includes the possibility, left open in PTMP, of demolition and limited new replacement construction. These proposed actions are limited to the portion of the PHSH district identified as the project site (site) on the attached figure. The project site includes the PHSH and its complex of nearby dormitories, offices, residences, and recreational buildings on the lower plateau, possibly Battery Caulfield on the upper plateau at the north end of the district, and several outlying building premises. In connection with the project, the Trust will adopt Planning and Design Guidelines¹, make conforming changes to the PTMP (if any), approve a development agreement and lease for buildings within the district, and approve associated building and site improvements.

Building space within the site totals approximately 400,000 square feet (sf). Building 1801 includes a historic structure of approximately 173,000 sf and non-historic additions (or "wings") totaling approximately 124,700 sf. Pursuant to draft Planning and Design Guidelines, non-historic portions of the hospital building may be removed. Although not required, replacement construction up to an amount equivalent to the square footage removed, not to exceed 130,000 sf,

¹ Draft Guidelines are currently available upon request; will be circulated for review as an appendix to the EA.

may be considered within the project site. A brief description of possible project alternatives is provided below.

Environmental Review, Tiering, and Scoping

The Trust is initiating scoping² and will prepare an environmental assessment (EA) for the project pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA) as amended (42 U.S.C. 4321-4347), the regulations promulgated by the Council on Environmental Quality (40 CFR 1501.3 and 1501.7), and the Trust's regulations implementing NEPA (36 CFR 1010.11 and 1010.12). The EA will "tier" from the PTMP Environmental Impact Statement (EIS) by incorporating by reference the information and analysis in the PTMP EIS and concentrating on site-specific issues related to the PSHH project proposal.

The Trust welcomes your comments on the proposed PSHH project alternatives and the scope of the EA. Please send your written comments at the earliest possible date but not later than **November 26, 2003** **December 10, 2003** to John Pelka, NEPA Compliance Manager, The Presidio Trust, 34 Graham Street, P.O. Box 29052, San Francisco, CA 94129-0052 (fax: 415/561-2790) or phsh@presidiotrust.gov. As part of the NEPA scoping process, you are invited to attend a public Trust Board meeting on **October 29, 2003** beginning at 6:30 p.m., at the Presidio Officers' Club (50 Moraga Avenue) at which the Trust Board will accept oral scoping comments from the public on the proposed action described herein, the proposed alternatives to be studied under NEPA, and the scope of the EA. The Trust Board will also receive oral scoping comments at a public meeting to be held on **December 10, 2003** beginning at 6:30 p.m., at the Presidio Officers' Club.

The Trust will provide informal information updates and notices concerning the proposed action through postings on its website at www.presidiotrust.gov, or through its bi-monthly publication, the Presidio Post. The Trust will announce the release of the EA by notice in the Presidio Post, as well as through a direct mailing. A tentative schedule for the environmental review under NEPA is provided in the last section of this information packet. If you have any questions, seek additional information, or wish to be added to the project mailing list for the PSHH, please call 415/561-5414. Thank you for participating in the PSHH scoping process.

Project Purpose and Need

The purpose of the project is to rehabilitate and reuse the buildings within the PSHH district. The project is needed to arrest the physical deterioration of the buildings; protect the National Historic Landmark District and rehabilitate the district's historic structures consistently with the Secretary of Interior's Standards; generally improve the appearance and vitality of the project site; reuse the buildings consistently with the PTMP land use options; and generate revenue for the long-term operation and improvement of the Presidio.

Goals and Objectives

The project must balance the Trust's goals and objectives:

² Scoping refers to the process by which an agency solicits input from the public and interested agencies on the nature and extent of issues, impacts, and alternatives to be addressed in an environmental review document under the National Environmental Policy Act (NEPA).

Historic Resources – The Trust seeks to preserve the historic resources in the PHSB district that contribute to the Presidio’s designation as a National Historic Landmark District (NHL). Preservation and rehabilitation of historic buildings within the district is an essential goal of the project, as is ensuring that physical changes are compatible with the NHL.

Revitalization and Reuse – The Trust seeks to reactivate the PHSB project site, to provide land uses that are consistent with PTMP, and to improve the overall appearance of the area. Under PTMP, residential use is the preferred use for Building 1801, with residential, educational, and other supporting uses elsewhere in the district. Public access to open spaces is to be preserved.

Traffic and Parking – The Trust seeks to limit traffic and parking demand related to reuse of the site, and will require prospective tenants to participate in the Trust’s transportation demand management program, which encourages alternatives to single-occupant automobile use. The project must include uses or programs that limit traffic and parking demand. Program elements may include use of paratransit, public transportation support, and other incentives and disincentives.

Financial Contribution – The Trust must become financially sustainable over the long-term, and seeks a project that enhances the viability of the Presidio. Revenues support the Trust’s congressional mandate to preserve and protect the Presidio for public use in perpetuity. The Trust, therefore, seeks to realize the full economic benefit of its large residential projects.

Design Quality & Environmental Sustainability – The Trust seeks high quality site planning and design, compatible with the NHL and surrounding neighborhoods, and seeks environmentally sustainable building design, materials, techniques, and construction practices.

Natural Resources – The Trust seeks to protect the undeveloped areas within and adjacent to the PHSB district. These areas shelter many important plant and wildlife habitats, including that of the San Francisco lessingia, a federally-listed endangered plant.

Other Plans and Projects – The Trust seeks a project that is consistent with other activities and projects envisioned in the PHSB district. These other activities and projects include: remediation of land fills consistent with the ongoing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process; improvement and establishment of trails, bikeways, an overlook and trailhead consistent with the Presidio Trails and Bikeways Master Plan; restoration of natural areas and improvement of designed landscapes consistent with the Presidio Vegetation Management Plan (as amended through the PTMP); habitat enhancements included in the Quail Habitat Enhancement Plan; and access improvements to 14th and 15th Avenues, as described in the PTMP.

Scope of Alternatives to be Considered in the PHSB EA

Four project alternatives are being considered for evaluation in the EA. These include three action alternatives, each with differences in treatment of Building 1801 and in the proposed amount and location of demolition and new replacement construction. In addition, the Trust will analyze a “no action” alternative required by the NEPA, which in this situation will constitute the land use scenario analyzed in the PTMP EIS. The Trust’s selected action at the conclusion of the environmental review process may combine various elements of the alternatives, or fall within the range they represent. The text and table which follows summarizes key assumptions shared by all alternatives and their distinguishing features. A more detailed description and illustration of project alternatives will be included in the EA.

Characteristics Shared by All Alternatives – Under all alternatives, reuse of the district would be guided by policies and guidelines within the PTMP, including applicable mitigation measures in the PTMP EIS. These include the following:

- The total square footage in the district after project implementation would not exceed 400,000 sf, as stated in the PTMP.
- A prerequisite of any proposed new construction would be the deconstruction of at least an equivalent amount of square footage within the district. New construction, if any, may not exceed 130,000 sf.
- The total number of residential units Presidio-wide would not exceed the maximum established in PTMP (1650 units).
- All alternatives would provide for the rehabilitation of the historic portion of Building 1801. Rehabilitation of Building 1801 and other historic buildings would be in accordance with the Secretary of the Interior's Standards.
- Any new construction would be sited within the boundaries of the project site and configured to be compatible with the historic district and to conform to Planning and Design Guidelines to be finalized prior to project implementation.
- Measures would be taken to protect significant native plant communities, endangered species, the natural resources within the Nike Swale, and the local California Quail population supported within the district.
- Primary access would be provided through the reopened 14th Avenue Gate (and possibly Park Presidio), and 14th and 15th Avenues would be operated as a couplet.
- Traffic on Battery Caulfield Road would be limited to local access, and cut-through traffic would be minimized.
- The various remediation sites located within the district would be subject to cleanup as part of the Trust's Presidio-wide environmental remediation program.
- All alternatives would allow for proposed bike and pedestrian trails within the district to connect with nearby local and regional trails.
- Finally, the former Nike missile site and Marine cemetery on the upper plateau would be interpreted for visitors.

Alternative 1: Rehabilitation/No New Construction (PTMP) – This alternative would rehabilitate buildings within the PHS district to accommodate residential (i.e., a mix of senior housing/assisted living and market rate housing) and educational uses. No building demolition or replacement construction would occur, and therefore the existing total building area of 400,000 sf would be maintained. The historic concentration of development would be retained on the lower plateau (i.e., the PHS complex), and the three-acre Battery Caulfield site, on the northern end of the district on the upper plateau, would continue to be used in the short term as a maintenance/corporation yard for Trust operations. The historic portion of Building 1801 and its non-historic additions (including the seven-story end "wings" and large one-story "connector" in front of the original main entry) would be rehabilitated for residential use (approximately 200 units) together with the historic housing on Wyman Terrace (approximately 11 units). Other ancillary buildings in the district would be rehabilitated for a variety of educational and supporting uses. Outlying buildings (Buildings 1450, 1818 and 1819) would remain as Trust maintenance facilities.

Alternative 2: Rehabilitation/Infill Construction – This alternative would rehabilitate historic buildings within the PHS district, and would concentrate and locate development on the lower plateau for primarily residential use (between 300 and 390 units total). Both the historic portion

and non-historic wings of Building 1801 would be rehabilitated. Approximately 17,000 sf of non-historic buildings, including the front connector and the two-story additions at the rear of Building 1801, would be removed and replaced with an equivalent amount of compatible infill construction at locations on the lower plateau that conform to the draft Planning and Design Guidelines. No new buildings would be constructed on the Battery Caulfield site, which would remain in the short term as a Trust maintenance/corporation yard. This alternative may also include a new underground parking facility beneath Building 1801 to increase landscaped open space on the lower plateau.

Alternative 3: Rehabilitation/Demolition – This alternative would rehabilitate historic buildings within the PHSB district, remove the non-historic wings of Building 1801, and provide no replacement construction at Battery Caulfield or elsewhere within the district. Total square footage in the district would decrease to about 275,000 sf. Buildings would be rehabilitated for primarily residential use (about 210 to 230 units total). The Battery Caulfield site would remain in the short term as a Trust maintenance/corporation yard, and outlying buildings would continue to serve as Trust maintenance facilities.

Summary of Alternatives for the PHSB Project ¹				
	Alternative 1: Rehab / No New Construction (No Action)	Alternative 2: Rehab / Infill Construction	Alternative 3: Rehab / Demolition	Alternative 4: Rehab / Relocated Construction
Preservation of Historic Portion of Main Hospital Building and other Historic Buildings	Yes	Yes	Yes	Yes
Maximum Building Area	400,000 sf	400,000 sf	275,000 sf	400,000 sf
Proposed Uses within PHSB Complex on Lower Plateau	Residential ² (up to 210 units / 210,000 sf) & Other ³ Uses (190,000 sf)	Residential ² (up to 390 units / 385,000 sf) & Other ³ Uses (15,000 sf)	Residential ² (up to 230 units / 275,000 sf)	Residential ² (up to 260 units / 300,000 sf) & Other ³ Uses (18,000 sf)
Proposed Uses within Battery Caulfield on Upper Plateau	Corporation Yard for Trust Operations (Existing Use)	Corporation Yard for Trust Operations (Existing Use)	Corporation Yard for Trust Operations (Existing Use)	Residential (up to 90 units / 82,000 sf)
Underground Parking	No	Yes	No	No
Removal of Non-Historic "Wings" of Building 1801	No	No	Yes	Yes
Maximum Demolition	0	17,000 sf	125,000 sf	115,000 sf
Maximum New Construction	0	17,000 sf	0	Up to 125 units / 115,000 sf
Maximum Residential Units	211	300-390	210-230	300-350

¹ All numbers are approximate and subject to change based on scoping comments and leasing proposals.

² Residential Uses = Mix of senior/assisted living and market rate housing (to be determined).

³ Other Uses = Mix of accessory uses and cultural/education-related uses. May include the retention of some existing tenants and Trust facilities.

Alternative 4: Rehabilitation/Relocated Construction – This alternative would rehabilitate historic buildings within the PHSB district, remove the non-historic wings and provide for replacement construction within the Battery Caulfield site for primarily residential uses. Several non-historic buildings including the wings and connector in front of Building 1801, the addition to Building 1802, and Building 1803 would be removed and replaced with an equivalent amount of compatible new residential construction (up to 125 residential units not to exceed 115,000 sf)

within the lower plateau and within Battery Caulfield (about 90 units) for a total of 300 to 350 residential units.

Initial List of Topics to be Considered in the PHS EA

The following environmental issues were previously evaluated in the PTMP EIS. They will also be addressed in the PHS project-specific EA. The EA will, where appropriate, incorporate by reference the information and analysis from the PTMP EIS, and will focus the EA on issues specific to each proposed project alternative. The relevance of PTMP EIS mitigation measures to the current project will also be discussed.

- Historic Architectural Resources and the Cultural Landscape
- Archaeology
- Geology and Soils
- Biological Resources
- Wetlands, Streams and Drainages
- Water Quality
- Visual Resources
- Air Quality
- Noise
- Land Use
- Socioeconomic Issues/Housing Supply
- Schools
- Visitor Experience
- Recreation
- Public Safety
- Transportation
- Construction Traffic
- Parking
- Water Supply and Demand
- Wastewater Treatment and Disposal
- Storm Drainage
- Solid Waste
- Energy Consumption and Distribution
- Natural Gas Supply
- Cumulative Impacts

Next Steps

The scoping process is scheduled to end on ~~November 26, 2003~~ December 10, 2003, at which time all public comments on the information outlined in this packet are due. In preparing the EA, the Trust will consider all comments received. The EA will contain a brief discussion of the purpose and need for the proposed action, alternatives to the proposed action, environmental impacts of the proposed action and alternatives, relevant mitigation measures and a list of agencies and persons consulted. At this time, the Trust expects that the EA will be made available for public review in January 2004. During the EA's public review period, which has not yet been determined, the Trust expects to hold one or more public meetings on the project and EA. At least one meeting would be a public hearing to receive and record oral comments.

Appendix C

Construction and Demolition Debris Management Plan Requirements

Appendix C. Construction and Demolition Debris Management Plan Requirements

The California Integrated Waste Management Act (commencing with Public Resources Code section 40000) encourages all levels of governments within the state to develop source reduction, reuse, recycling, and composting programs to reduce the tonnage of solid waste disposed in landfills.

Construction, demolition, and land-clearing debris generated by construction are among the materials targeted by the Trust to achieve these state-mandated diversion rates. Construction and demolition debris account for a significant portion of the mixed solid waste disposed of at landfills.

CONSTRUCTION AND DEMOLITION DEBRIS MANAGEMENT PLAN

The Trust will ensure that the PHSB project would minimize construction and demolition debris disposal in accordance with the requirements set forth in a Construction and Demolition Debris Management Plan. The Trust will require the private development team and/or its contractor responsible for demolition to:

- conduct a site assessment to estimate the types of materials that will be generated by demolition at the site that are anticipated to be feasible and practical for reuse and recycling; and
- complete a Construction and Demolition Debris Management Plan that describes the procedures for disposal, reuse or recycling.

Plan Requirements

Prior to commencement of demolition, the Trust Project Manager will meet with the private development team and/or its contractor to develop a plan for managing construction and demolition debris to enable the Trust and the private development team to develop a mutual understanding regarding recycling and reuse.

The private development team and/or its contractor will prepare and submit to the Trust Project Manager a written construction and demolition debris management plan. The construction and demolition debris management plan will include, but not be limited to, the following information:

- contractor and project identification information;
- procedures to be used for debris management;
- a listing of the materials to be reused, recycled, or landfilled;
- an estimate of the quantities to be reused, recycled, or landfilled; and
- the names and locations of reuse and recycling facilities or sites.

The construction and demolition debris management plan is subject to the approval of the Trust Project Manager.

Recycling of Construction and Demolition Debris

The Trust will require the private development team and/or its contractor to develop and implement procedures to reuse and recycle materials to the greatest extent feasible based upon the construction and demolition debris management plan, the estimated quantities of materials, and the availability of recycling facilities.

The private development team and/or its contractor will develop and implement programs for on-site or off-site recycling of source-separated materials, including asphalt, concrete, concrete block, and rocks; dirt and sand; metals (ferrous and non-ferrous); wood; green materials (e.g., tree trimmings) and other materials as appropriate, such as red clay brick, corrugated cardboard, and wall board; mixed debris; and salvageable items. Prior to delivering materials, the contractor will familiarize itself with the specifications for acceptance of construction and demolition materials at recycling facilities.

Approval of the contractor's construction and demolition debris management plan by the Trust Project Manager will not relieve the contractor of the duty to comply with any other applicable laws regulating control or disposal of solid waste or other pollutants.

Summary of Diversion; Disposal

The Trust Project Manager will require that the contractor submit a monthly summary of construction and demolition debris diversion and disposal, quantifying all materials generated at the work site and disposed of in Class III Landfills (as defined in Title 27 CCR 20260), or diverted from disposal through recycling. The contractor will be responsible for transporting and disposing of materials that cannot be delivered to a source-separated or mixed materials recycling facility to a transfer station or disposal facility that can accept the materials in accordance with state law. No unacceptable solid waste will be burned, buried or otherwise disposed of on the project site.



Appendix D

Consultation Letters



January 7, 2004

Mr. Bijan Sartipi
Director, Caltrans District 4
111 Grand Avenue
P.O. Box 23660
Oakland, CA 94623-0660

Dear Mr. Sartipi:

I am writing to request your support for a project that will benefit the Presidio of San Francisco, the State highway system, and our neighbors in the City and County of San Francisco. I would also like to thank your staff, including Rod Oto, Mort Azimi, John Thomas, and Jared Goldfine, for meeting with representatives of the Presidio Trust on January 5, 2004 to discuss this project.

As discussed at that meeting, the Presidio Trust would like Caltrans' support and approval of a new signalized intersection on Park Presidio Boulevard (Highway 1) approximately 450 feet north of the existing intersection of Park Presidio Boulevard and Lake Street in San Francisco. The new intersection would allow direct vehicular access between Highway 1 and the Public Health Service Hospital district of the Presidio, which is slated for reuse as a residential community.

The new intersection would address traffic concerns in the neighborhood south of the Presidio and would effectively reduce the speed of vehicles approaching the residential areas of San Francisco on southbound Park Presidio Boulevard. Slowing traffic would increase safety for pedestrians, bicyclists, and motorists at the existing intersection of Park Presidio Boulevard and Lake Street. This intersection experiences numerous traffic accidents, as demonstrated by the enclosed data.¹ As a result, the San Francisco Department of Parking and Traffic has indicated their support for this project.

¹ Note: The enclosures to the original letter include a figure of the new intersection, a traffic collision history report for the existing intersection at Park Presidio Boulevard and Lake Street prepared by the City and County of San Francisco Department of Parking and Traffic, and a San Francisco Chronicle article reporting a fatal accident at the Park Presidio Boulevard and Lake Street intersection (<http://www.sfgate.com/article.cgi?file=/chronicle/archive/1996/09/11/MN57241.DTL>). A copy of the original letter and enclosures are on file and available for review in the Presidio Trust Library.

The Presidio Trust plans to secure funding from private and/or federal sources for the new intersection, which would occur entirely within State and federal (Presidio Trust) right of way. We have shared the attached preliminary plan of the intersection with your staff, together with our analysis of its operational characteristics, and look forward to continued communications with Caltrans.

A statement of your support would facilitate those communications and the Trust's rehabilitation of the Public Health Service Hospital. Please do not hesitate to call me or my assistant Mollie Matull at (415) 561-2751 if you require further information.

Sincerely,

[Signed copy on file and available for public review in the Presidio Trust Library]

Craig Middleton
Executive Director

Enclosure

cc: Senator Diane Feinstein
Senator Barbara Boxer
Representative Nancy Pelosi
Sunnie McPeak, Secretary of Business, Housing and Transportation
Jeff Morales, Director, California Department of Transportation
San Francisco Mayor Gavin Newsom
Gerald Norman, Executive Director, San Francisco Department of Parking and
Traffic



February 20, 2004

Knox Mellon
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
PO Box 942896
Sacramento, CA 94296

ATTN: Hans Kreutzberg

RE: The Area of Potential Effects (APE) for a Proposed Undertaking at the
Public Health Services Hospital in Area B of the Presidio of San Francisco

Dear Dr. Mellon:

Pursuant to Stipulation V of our Programmatic Agreement, the Presidio Trust would like to request your consultation regarding delineation of the Area of Potential Effects (APE) for a proposed undertaking within the Presidio of San Francisco. The undertaking involves rehabilitation and reuse of historic buildings in the PHSB District, mostly for residential use, in conformance with a governing planning document called the "Planning and Design Guidelines for the Public Health Services Hospital District."

A draft of this governing planning document dated February 2004 is being submitted to you and other signatories of the Programmatic Agreement in conformance with the consultation process outlined in Stipulation X of the Agreement. The enclosed environmental assessment (EA) includes the draft Planning and Design Guidelines as Appendix A, and also includes a description of the undertaking (Alternative 2). The Trust's proposed APE is illustrated on Figure 2 of the draft Planning and Design Guidelines, and coincides with the boundaries of the Public Health Service Hospital planning district delineated in the Presidio Trust Management Plan.

Please do not hesitate to call me at (415) 561-5316 if you have any questions regarding the undertaking, the proposed APE, or the enclosed materials.

Thank you for your attention and your continued support.

Sincerely,

[Signed copy on file and available for review in the Presidio Trust Library]

Hillary Gitelman
Director of Planning & Resources
Presidio Trust Federal Preservation Officer

cc. Jane Crisler, Advisory Council on Historic Preservation
Ric Borjes, National Park Service
Diane Hermann, Fort Point & Presidio Historical Assn.
Mike Buhler, National Trust for Historic Preservation
Juli Polanco/NHPA Compliance File



February 20, 2004

Jane Crissler
Advisory Council on Historic Preservation
12136 West Bayaud Avenue
Lakewood, CO 80226

Knox Mellon
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
PO Box 942896
Sacramento, CA 94296
ATTN: Hans Kreutzberg

Ric Borjes
National Park Service
Golden Gate National Recreation Area
Fort Mason, Building 201
San Francisco, CA 94123

RE: Proposed Undertaking at the Public Health Service Hospital in Area B of
the Presidio of San Francisco

Dear Signatory Parties:

This letter and enclosures constitute a "consultation package" pursuant to Stipulation X of our Programmatic Agreement, and concern the Trust's proposed undertaking within the Public Health Service Hospital (PHSH) District of the Presidio. The proposed undertaking would include the rehabilitation and reuse of historic buildings in the PHSH District, mostly for residential use, together with landscape changes and new construction consistent with a proposed governing planning document called the "Planning and Design Guidelines for the Public Health Service Hospital District."

Contents of this consultation package include public "scoping" comments and the proposed "Planning and Design Guidelines for the Public Health Service Hospital District," which is included as Appendix A of an Environmental Assessment (EA).

Figure 2 of the Planning and Design Guidelines illustrates the Area of Potential Effect (APE) that the Trust has proposed. We have requested the State Historic Preservation Officer's consultation on this APE pursuant to Stipulation V of the Programmatic Agreement.

The PHSH EA is currently being circulated for public and agency review, and includes a description and analysis of the proposed undertaking (Alternative 2). Based on this analysis, on the scope of the proposed Planning and Design Guidelines, and on the mitigation measures included in the EA, the Trust has preliminarily concluded that the proposed undertaking would have No Adverse Effect on historic and cultural resources, including the Presidio National Historic Landmark District and its contributing features.

Once we have received the SHPO's input on the proposed APE and made any necessary adjustments to the APE, we will view this consultation package as complete, and will request your review and consultation pursuant to Stipulation X of the Programmatic Agreement. This means we will contact you to schedule a conference call, and will afford concurring parties at the National Trust for Historic Preservation and the Fort Point & Presidio Historical Association an opportunity to submit written comments in advance of the conference call.

Please do not hesitate to call me at (415) 561-5316 if you have any questions regarding this letter or the enclosed materials.

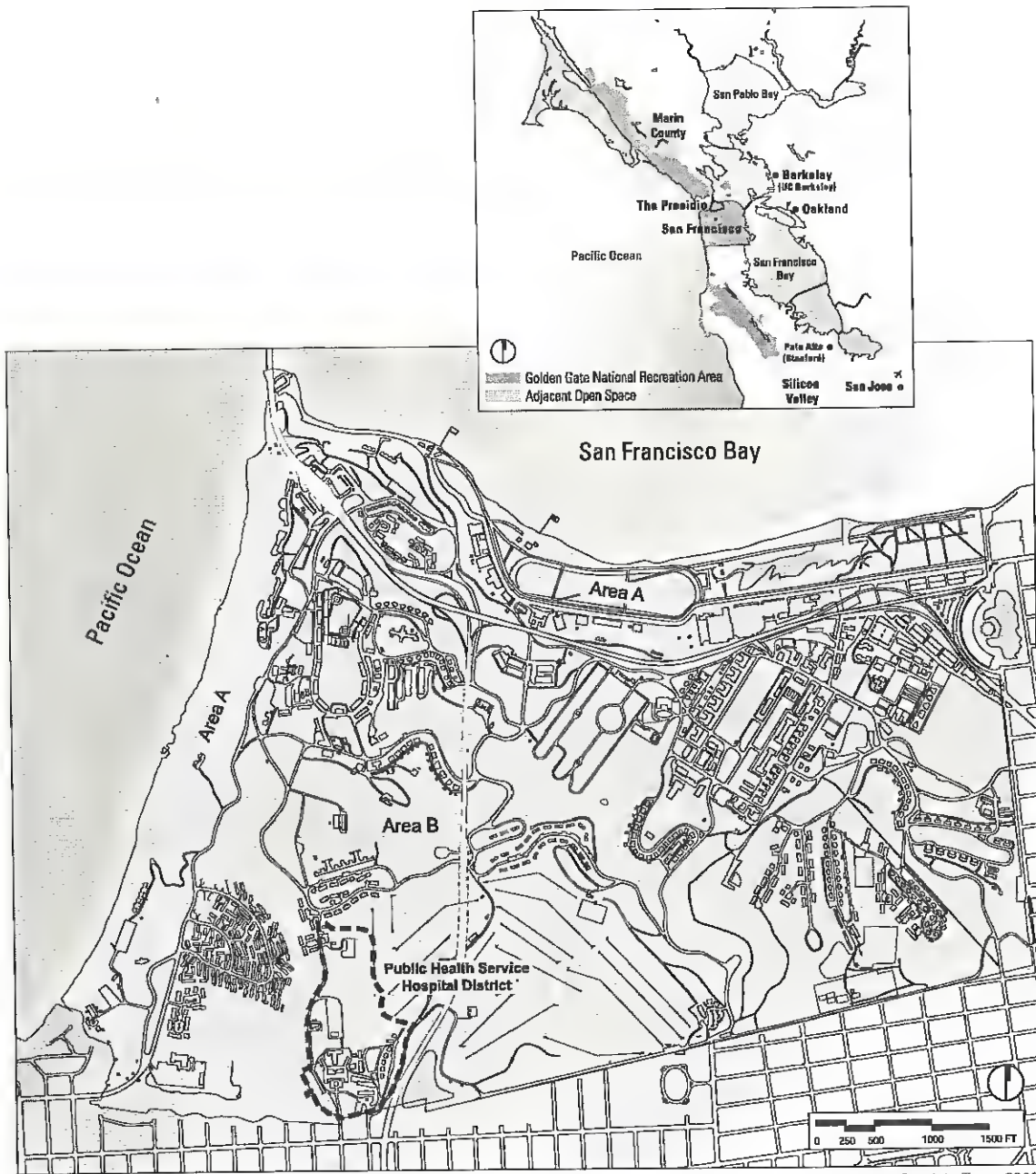
Thank you for your attention and your continued support.

Sincerely,

[Signed copy on file and available for review in the Presidio Trust Library]

Hillary Gitelman
Director of Planning & Resources
Presidio Trust Federal Preservation Officer

cc. Diane Hermann, Fort Point & Presidio Historical Assn.
Mike Buhler, National Trust for Historic Preservation
Juli Polanco/NHPA Compliance File



source: Presidio Trust, 2003



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